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Graduate employment in South Africa: prevalence, characteristics and perceived causes

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2014-01-21
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Graduate unemployment in South Africa:
Prevalence, characteristics and perceived causes

Submitted in partial fulfillment for a Master of Arts,
in Research Psychology by research and coursework degree, at the
University of the Witwatersrand's School of Human and Community Development.

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March 2013

Declaration

This report is being submitted in partial fulfillment for a Master of Arts in Research Psychology by research and coursework degree at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to any other University. I declare that the whole work is my own contribution and I have not plagiarised from any sources. All sources that I have used are referenced in the text and appear in the reference section of the report.



Kim Baldry

22 March 2013

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Acknowledgements

I wish to thank Magnet Communications for generously giving me access to their student database. Without them this research would not have been possible. Thank you to my supervisor, Brendon Barnes, for his guidance and insight. Lastly, thank you to all the participants who gave of their time to participate in my study.

Abstract

The prevalence, characteristics and causes of unemployment in the general population have been well researched in South Africa, however, the sub-population of unemployed graduates has been studied to a far lesser extent. In this mixed methods research, 2029 participants from the 23 public higher education institutions in South Africa were surveyed. The online survey was sent to approximately 20 000 participants via email, with an invitation to participate in the study and information on the study. The dependent variable was employment status; three categories described the employed and two categories described the unemployed. Survey results were analysed using frequency distributions, chi-squared analysis and binary logistic regression. Thereafter, ten Black, low socio-economic status, unemployed graduates were interviewed telephonically. The interview transcripts were analysed thematically looking for both variation and consistency. The results showed that unemployment in the sample was 5.1%. Black graduates, graduates of low socio-economic status and graduates with difficulty accessing resources showed the highest prevalence of unemployment. Having received career guidance was not associated with employment status. The perceived causes of unemployment were lack of resources available to look for a job, the lack of connections to the labour market and discriminatory recruitment practices.

Keywords: graduate, unemployment, career services, graduate recruitment, community psychology, mixed methods.

Chapter 1: Introduction

1.1 Introduction

Unemployment is probably the single most pressing challenge facing South Africa today (Levinsohn, 2007) and given the considerable resources invested in education by both public and private individuals, the focus on graduate unemployment is essential (Moleke, 2003). Education has always been evaluated in terms of its practical value (Gbadamosi & de Jager, 2009) and has long been recognised as the means to achieve change, create new ideas, and initiate new practices that move a country towards increasing prosperity (Wheatley, 2001). Lam, Leibbrand, and Mlatsheni (2008) indicated that tertiary education is increasingly important in facilitating a move into employment, resulting in increasing prosperity.

According to government national statistics provided by Statistics South Africa (StatsSA), the unemployment of those with a tertiary education has increased from 4.4% in 2008 to 6.3% in 2011, an increase of 1.9%. During the same period the unemployment rate of those with Matric increased by 1.2% and decreased by 3.3% among those with education lower than Matric (StatsSA, 2012), therefore unemployment among those with a tertiary education grew quicker than those with Matric, or lower than Matric education. These statistics must be seen in context of their narrow and therefore limiting definition of unemployment that may result in an underestimation of unemployment figures (discussed in the literature review). While graduate unemployment is relatively small when compared to unemployment in the general population, which was 23.9% at the end of 2011 (StatsSA, 2012), it appears that unemployment amongst those with tertiary education is growing faster than among those with less education.

The perceived causes of graduate unemployment is worth studying as in addition to the high unemployment rate, South Africa's spending on education is one of the highest in the world and in direct contrast, its university graduation rate of 15% is one of the lowest in the world (Cosser & Letseka, 2010). While this must be viewed in light of the impact of apartheid and the increasing number of university enrollments, it nonetheless raises serious questions about the role of skills and

education in the economy (e.g. Altman, 2003; Kingdom & Knight, 2005; Letseka & Maile, 2008; Pauw, Oosthuizen & van der Westhuizen, 2008).

Against this backdrop, the aim of this research was to expand our understanding of graduate unemployment in South Africa. The specific objectives were to;

- Measure the prevalence of graduate unemployment using a database of students who graduated from all 23 public higher education institutions.
- Identify demographic and educational factors that may be associated with graduate unemployment.
- Qualitatively explore unemployed graduates' perceived reasons for their unemployment, and to
- Qualitatively explore the role of higher education institutions' in providing career services, from the unemployed graduates' perspective.

1.2 Chapter outline

Chapter 2 reviews literature relevant to the study of graduate unemployment and summarises the gaps in the current literature. Chapter 3 describes the methods employed in this research and includes the sub-headings design, sample and sampling, the instruments, variables, procedure and analysis, and ethics. Thereafter the results are reported in Chapter 4, with the survey results presented first followed by the interview results. Lastly, Chapter 5 comprises the discussion, summary and conclusion respectively. In Chapter 5 key results are discussed, the conceptual framework presented in Chapter 2 is revisited and implications for theory, methods and policy are suggested.

Chapter 2: Literature Review

2.1 Defining unemployment and education level

The first step in conducting a study on graduate unemployment should begin with a definition of these terms. Graduate, in other literature, has been used to describe people with college education (Cosser, 2003), people who are targeted by companies in their graduate recruitment programs (Pauw, Bhorat, Goga, Ncube & van der Westhuizen, 2006), people with higher education (Moleke, 2003) and broadly students who have graduated (Letseka, Cosser, Breier & Visser, 2010). Most times the authors do not explicitly define the term 'graduate' or where the student has graduated from and the reader is left to interpret this by the sample used in the study. In this study a graduate is defined as a person who has studied at, and graduated with their highest qualification from, a South African public higher education institution.

In addition to the inconsistent use of the term graduate, education level of graduates or those with higher education[1] is reported by varying and sometimes overlapping categories. StatsSA has reported education level using the categories 'diploma/certificate with Grade 12', 'degree/higher' and 'other' (e.g. StatsSA, 2008a) and 'Matric' and 'tertiary' (e.g. StatsSA, 2012). Researchers use their own terms to describe education level for example, Moleke (2010) refers to education using the terms 'graduates', Levinsohn (2007) refers to education using the terms 'some post matric' and 'degree', and Pauw et al., (2008), use the terms 'Grade12/Matric', 'tertiary diploma/certificate' and' tertiary degree'. These education levels are fairly broad and while they are helpful in understanding broad trends in graduate unemployment and allowing comparisons of graduates with other education levels such as Matric/Grade 12 and less than Matric/Grade12, they provide little opportunity to compare specific groups of graduates with each other. For example: they do not facilitate the comparison of different levels of study with each other such as diploma graduates with degree graduates; they do not facilitate the

[1] Higher education and tertiary education are used interchangeably and refer to education following secondary education.

comparison of different fields of study with each other such as humanities graduates with engineering graduates; and they do not facilitate the comparison of higher education institution[2] types with each other such as public and private higher education institutions[3].

To my knowledge, the Human Sciences Research Council report graduate employment and unemployment in the most detail, often including field of study and level of study variables. Offset against this strength are other limitations in using their research to build a picture of graduate unemployment in South Africa. For example, their study on graduate destinations, (Letseka, Breier and Visser, 2010), sampled seven public higher education institutions whereas there are 23 public higher education institutions in South Africa. Additionally, in this study as well as their previous study reported by Moleke (2005), they do not explicitly define the term 'graduate' and it is unknown whether they are referring to a person's highest qualification (as graduates may have more than one qualification either of different levels and/or different fields of study) or to what level of education they are referring (for example there is no distinction between a humanities certificate graduate and a humanities degree graduate).

In addition to the lack of explicit definitions of a graduate and the inconsistent reporting of their education level discussed above, I now turn to another reflection of the graduate unemployment research, that being the difficulty in defining 'employment status'. Defining and categorising employment status is difficult mainly due to the large range of employment possibilities that exist. For example, categorising a person who works only 4 hours per month – are they unemployed or part-time employed? Or categorising a person who works for themselves but whose income is inconsistent and sometime equal to zero – sometimes they are self-employed but what employment category are they when

[2] In this report a higher education institution is defined as a public education institution that provides post-secondary education qualifications at an under-graduate and post-graduate level.

[3] Private higher education institutions were not included in this study as the existing dataset used for sampling did not include graduates from private higher education institutions.

they are not earning any money? Or categorising a waitress who is also a student[4] - should this person be categorised as employed or as a student? As indicated above often people move between possible categories, such as self-employed and unemployed or they can fall equally into two employment categories at the same time such as a student and a waitress. These dual categories are not included in employment surveys.

The most widely used definition of employment status in South Africa is that reported by StatsSA. A brief description of how they define employment is required as numerous articles referred to in this study have utilised their definitions, and to expand on difficulties defining individuals' employment status.

StatsSA defines working age as persons aged 15-64 years old. Employed are those persons of working age who, during the reference week of the StatsSA survey: (a) did any work for at least one hour, or (b) had a job or business but were not at work. Unemployed according to the *official* definition are people of working age who (a) were not employed in the reference week of the survey, and (b) actively looked for work or tried to start a business in the four weeks preceding the survey interview, and (c) were available to work, or (d) had not actively looked for work in the past four weeks but had a job or business to start a definite date in the future and were available. According to the *expanded* definition, unemployed are those of working age who (a) were not employed in the reference week, and (b) were available to work. The second criterion of having actively looked for work is dropped in the expanded definition. Those who are not employed or unemployed are classified as not economically active. Those who are not economically active are further categorised as either not available to work or available to work but have not taken active steps to look for work and are termed discouraged work-seekers. The labour force comprises of those who are employed and unemployed. Figure 1 summarises StatsSA categories of employment presented above.

[4] In this report a graduate refers to a person who has studied at, and graduated from, a public higher education institution. A student is a person who is enrolled in a higher education institution but has not yet graduated.

Figure 1: StatsSA categories by which the working population is divided

<table>
<tr><td colspan="3">Working age population 15-64 years</td></tr>
<tr><td>Employed</td><td>Unemployed
- Official definition
- Expanded definition</td><td rowspan="2">Not economically active
- Not available to work
- Discouraged work-seekers</td></tr>
<tr><td colspan="2">Labour force</td></tr>
</table>

Source: StatsSA Labour Force Survey March 2007

However, as mentioned previously, there are problems with the StatsSA definitions. Firstly, that the expanded (or unofficial) measure of unemployment is a more accurate picture of the unemployed population than the official measure (e.g. Kingdom & Knight, 2000a). Secondly, Cosser & Sehlola (2009) note that these categories are not mutually exclusive. For example, a person could be studying and looking for work, and by the above definition thereby both not economically active (not available to work as they are studying) as well as unemployed (as they are actively looking for work). Thirdly, the StatsSA's definition of employed is problematic because it fails to capture underemployment. This is because any person who has worked for only one hour in the reference week is categorised as employed, regardless of whether they were available, willing and able to work additional hours, regardless of whether they were paid and regardless of whether the work they did was aligned with their qualification/skills level. Therefore, a graduate who is unemployed but who worked/volunteered for one hour in the reference week would by the above definition be classified as employed. This raises the question of whether the definition of employment - a minimum of one hour's work in the reference week – does not disguise unemployment (Kingdon & Knight, 2005), and also include many people who are either grossly underemployed (Bernstein, 2010) or temporarily underemployed while looking for a better job (Moleke, 2003).

In summary, defining employment is very difficult and most studies utilise StatsSA statistics as these are "currently by far the reliable source of information" (Altman, 2003, p.159). A review of graduate employment research in South Africa, conducted by Koen (2006) noted that a key shortcoming in graduate employment

research is the absence of clear definitions of, for example, what an unemployed graduate is and that no standard definition is available, only the narrow or expanded definition used in surveys. However, regardless of which definition of unemployment is utilised, unemployment in South Africa is extremely high by international standards (Bernstein, 2010).

This study attempted to address some difficulties in defining unemployment in two of ways. Firstly unemployment was categorized by two groups, namely those who are 'unemployed and looking for work' and those who are 'unemployed and not looking for work'. Those who reported to be unemployed and looking for work were categorized as unemployed regardless of when they last applied for work. Those who are unemployed and not looking for work were not categorized as unemployed as they were understood as not wanting to work currently. Therefore the StatsSA category of 'discouraged work seekers' are included in the unemployed sample regardless of whether they are actively looking for work or not but rather based on whether they have said that they are looking for work. Secondly, the employment category was extended to include underemployment, as all employed participants were asked whether they consider themselves to be underemployed.

The following sections look at the prevalence, characteristics and perceived causes of graduate unemployment. The review presented should be understood bearing in mind the prior discussion around lack of explicit definitions of terms and the difficulty in defining employment status.

2.2 Prevalence, characteristics and perceived causes of graduate unemployment

2.2.1 Prevalence and characteristics of graduate unemployment

The unemployment rate, calculated as the proportion of the labour force that is unemployed, is currently 25.5% (StatsSA, 2013), among the highest in the world (Bernstein, 2010). A longitudinal perspective on the prevalence and growth rate of graduate unemployment in South Africa is hard to establish given that StatsSA reports education level by differing categories and that their year on year reporting is inconsistent.

In spite of this there is evidence to suggest that the graduate unemployment rate is increasing. In a review on graduate employment research Koen (2006) reported that, using data from StatsSA, tertiary education unemployment rose from 6 to 12% nationally from 1995 to 1999. Looking at StatsSA's own publications, the percentage of the unemployed population with a diploma/certificate/degree/higher grew from a 3.5% market share of national unemployment in 2005 to 3.8% in 2007 (StatsSA, 2008b; StatsSA, 2008c). From October-December 2008 to the same period in 2009, unemployment of those with tertiary education grew from 4.4% to 5.4% (or by 31%). During this same period, the economically not active population with a tertiary education grew from 2.2% to 2.6% (or by 24.7%) (StatsSA, 2010). Using an independent database, Moleke (2005) reported that 6% of graduates were unemployed one year after obtaining their qualification. In 2010, using a similar methodology, she reported that 7.4% of graduates were unemployed. The data sets on which these two results are reported were collected for the period 1990-1998 and 2002 respectively. Taken together these statistics provide evidence that unemployment among those with a tertiary education is growing, but there is little information regarding which graduates this growth can be attributed to and why this growth is occurring.

In addition to the high unemployment rate, unemployment in South Africa is disproportionately distributed in the population, most noticeably by age, race and historically by gender. Approximately a third of the population aged 15-24 years are not employed and not in education or training (StatsSA, 2013). The youth, namely people aged 15-34 years make up 74% of the total unemployed population (StatsSA, 2008a) and the number of unemployed youth is growing much faster than any other group (Altman, 2003). These figures indicate that unemployment is higher among the younger population.

Unemployment by the official definition is 29.1% for the Black/African[5] population, 24.5% for the Coloured population, 11.7% for the Indian/Asian population and lowest for the White population at 5.9% (StatsSA, 2013). Therefore,

[5] In South Africa race is often reported using the categories: African/Black, Coloured, Indian/Asian and White. They are used to denote historically disadvantaged and advantaged groups.

in terms of race, the Black/African population shoulder the majority of the unemployment in South Africa.

StatsSA does not report the prevalence of graduate unemployment disaggregated by education level but they do report that those with tertiary education currently make up 5.9% of the unemployed population. This is up from 4.9% in 2008 (StatsSA, 2013). Therefore, unemployment among graduates is far lower than unemployment in the general population. Using an independent database of 2672 university graduates, Moleke (2005) found that 6% of graduates were unemployed a year after obtaining their qualifications and that race, gender and institution attended had a significant impact on graduates' employment prospects with African and Coloured graduates, females and graduates from historically Black universities (discussed in more detail later on) most likely to be unemployed. Unfortunately, Moleke's study did not provide a definition of the term 'graduate' and it was conducted between 1990 and 1998, which is prior to the restructuring of the South African Higher Education system which occurred from 2003-2005 (discussed in more detail later on). It therefore does not represent the current unemployed graduate population in South Africa. A more recent study on a sample of 101 Durban University of Technology graduates found that 36.2% of their sample of 2006 graduates were unemployed close to a year after graduation (van der Merwe, 2009). This indicates that the prevalence of graduate unemployment reported ranges from around 6% to over 30% and that further studies that reporte the prevalence of graduate unemployment are needed in order to clarify thise large discrepancy. Van der Merwe's study was only conducted at one of the 23 public higher education institutions, and on a relatively small sample, thereby inhibiting the generalization of these findings to other graduate samples. Furthermore van der Merwe does not suggest why the prevalence of unemployment she found was so high. Based on other literature (e.g. Moleke, 2005, 2010; Pauw et al., 2006; Pauw et al., 2008) it is likely to relate to the reputation of the higher education institution among graduate employers, the demographic profile of their graduates and/or the type and perceived quality of the graduate's qualification.

More conservative figures of graduate unemployment have been reported by Kingdon and Knight (2005). They reported the prevalence of unemployment among those with higher education as 13% in 2003, up from 6% in 1995. However, they also reported that in 1995, 25.6% of people with a higher education had been unemployed for longer than three years and this increased to 36.1% in 2003. This percentage increase of people who have been unemployed for longer than three years was the highest of all education levels, identifying graduate unemployment as a growing concern. Their study utilised StatsSA data collected in 1995 and 2003, and as they were primarily interested in guises of unemployment they included discouraged job seekers in their analysis of unemployment. This may explain why their reported statistics are relatively high. When describing the unemployed population they indicate that in South Africa the non-searching unemployed are on average significantly poorer than the searching unemployed and therefore suggest that job search is hampered by poverty and the cost of job-search particularly from remote rural areas. In this regard they conclude that the lack of a job search is due to discouragement and constraints such as poverty rather than weaker attachments to the labour market as is proposed by other researchers (e.g. Schoer, Rankin & Roberts, 2012). Although this data was collected on graduates prior to the restructuring of higher education in South Africa, which took place between 2003 and 2005, and is therefore not reflective of the current higher education environment, it highlights poverty as influential factor associated with unemployment.

Continuing with reports of the prevalence of graduate unemployment, Bhorat (2004) and Pauw et al. (2006) state that the growing joblessness among people with a university degree has become a disturbing trend in the post-apartheid South African labour market, whilst Levinsohn (2007) reports that unemployment is close to zero for those who have completed a university degree, implying that it is not a concern. Levinsohn reported unemployment among those with a degree as 4.46% among men and 5.27% among women. The University of Johannesburg found that 14% of their graduates sampled stated that they were not going to work or study in the year following their graduation in 2010 (Adams, 2011).

Taken together, we see that the prevalence of graduate unemployment is contested. Additionally, given general changes in South Africa after the end of the apartheid government in 1994, and specifically due to the restructuring of the South African higher education system around 2005 (both discussed shortly in more detail), it is difficult to compare results from studies conducted over the last 20 years. However, despite studies' discrepancies in defining both graduate and unemployment, and in light of the changing political and educational context, it is largely accepted that unemployment amongst those with tertiary education is low compared with unemployment of the general population, however that it may be on the rise. This is evidence for further study on the prevalence on graduate unemployment.

This concludes the literature on the prevalence of graduate unemployment, and the unequal distribution of unemployment, most noticeably by age and race. I now look at contextual issues relating to the study of graduate unemployment, namely apartheid[6] and the restructuring of the South African higher education system that followed the end of apartheid.

During apartheid, South Africa's higher education system, its nature and function were prescribed by law and the Extension of University Education Act (Act 45 of 1595) provided for the establishment of separate universities for the various population groups (Behr, 1984 cited in Raju, 2006). During this time, South Africa had a total of 36 higher education institutions of which 17 served the White population, 13 served the African/Black population and two each served the Coloured and India populations (Bunting, 2004 cited in van Zyl, 2010). Whites were by far the most advantaged race group, followed by Indians, then Coloureds and lastly Africans/Blacks. The policies and philosophies of apartheid education existed essentially to keep the non-White population in low paid, low skill level positions and "render them economically non-competitive" (Letseka, et al., 2010, p.32). White and Black schools and universities had the largest disparities in resources, funding,

[6] Apartheid was a system of racial segregation enforced in South Africa through legislation from 1948-1994. Under apartheid the rights of the majority non-White South African's were curtailed.

student-teacher ratios which all adversely affected the quality of education for Blacks.

Since 1994, when the first democratic elections were held in South Africa, a new de-racialised, higher education system has emerged. The number of public higher education institutions was reduced from 36 to 23, mainly through mergers between the formerly Black and White institutions (Pretorius et al., 2006). Following this restructuring, South Africa has one public higher education system consisting of three kinds of institutions namely; universities, comprehensive universities and universities of technology. The 11 universities offer degree type programs only, six universities of technology offer diploma type qualifications only and the six comprehensive universities offer degree and diploma type programs (Bunting, 2007 cited in van Zyl, 2010).

In the new system, all institutions are open to all race groups, however, Letseka, et al., (2010) noted that most historically Black institutions have remained largely Black while the racial profiles of most historically White institutions has changed considerably. In addition to the public higher education institutions approximately 100 private higher education institutions exist and unlike their public counterparts, they get no funding from the government (Pretorius et al., 2006). Appendix 1 shows a list of the current public higher education institutions with their type, the merged institutions from which they were formed and these institutions historically Black or White status.

In 2011, three public universities were placed under administration by the Department of Higher Education and Training, all necessitated by mismanagement. These were the Walter Sisulu University, the University of Zululand and Tswane University of Technology. Also, the merger between the University of the North and the Medical University of South Africa that created the University of Limpopo was undone (Snyman, 2011). These changes allude to differing quality of services among South Africa's higher education institutions, which is likely to affect graduates ability to secure employment, both in terms of the quality of their education and the perception of the institution among graduate recruiters.

This concludes my summary of the current context of higher education in South Africa. The following section looks at factors associated with the perceived causes of graduate unemployment.

2.2.2 Perceived causes[7] of graduate unemployment

In current graduate unemployment literature, causes of unemployment relate to attributes of the graduates themselves or individual factors, those that can be attributed to graduate employers or recruitment factors and to those that relate to the country's overall economy and growing labour force. Proposed causes of youth unemployment in general, not graduate unemployment specifically, include a lack of skills among the youth, lack of capital constraining entrepreneurship, the growing size of the youth labour force and high youth wages. In addition to these causes of youth unemployment, causes of graduate unemployment have included a skills mismatch between labour demand and tertiary education institutions' supply, the poor quality of education particularly at historically Black institutions, and discrimination in hiring practices whereby graduate recruiters chose to recruit graduates from particular higher education institutions and chose not to hire graduates from other institutions. Few published research reports look at the impact of higher education institutions' career services, a non-academic support service, related to graduate unemployment. Often research that looks at the role of the higher education institutions' and their graduate's employability, looks at the quality of the education offered and the reputation of the institution.

First I review perceived causes of graduate unemployment relating to factors of the individual, which include their demographic and educational factors. Thereafter I look at the perceived causes of graduate unemployment relating to factors within the graduates context such as the role of graduate employers and of the higher education institution. For clarity, the individual's education is considered

[7] Perceived causes refers to reports of causes in the literature, however, in almost all of the reports causality has not been proven. For example, in his review on the graduate unemployment research in South Africa, Koen (2006) reports that most graduate studies present descriptive variables in relation to the "causal chain examined" (p.14) although the studies to which he is referring did not test causality.

an individual factor whereas the services that the higher education institution supplies is considered a factor of the higher education institution.

Using data from the StatsSA 2005 Labour Force Survey, Levinsohn (2007) reported that unemployment amongst those with a degree is higher for women than for men. Similarly Cosser (2003), found a bias towards employment of males over females with 30% of males survey employed and only 21% of females. These findings indicate that in terms of gender, males have been shown to have greater employment prospects and lower unemployment than females. Mlatsheni and Rospabe (2002) found that Black and female youths have less access to the labour market than White and male youths and that the major factors explaining these were the employment enhancing features of Whites such as higher levels of education, their better family background and the location in areas of low unemployment. They also reported that youths in rural areas not only compete against increasing number of youths for jobs but also against the increasing number of older age cohorts. Therefore in addition to gender, race is also an important determinant of employment status.

Moleke (2010) found that those who graduated from historically Black institutions were absorbed into the labour market more slowly after they obtained their degree than those from historically White institutions and African and Coloured graduates had lower prospects for employment than their White and Indian counterparts. This indicates that race is also associated with individual's higher education institution. Moleke (2010) also reported that the most objective determinant of finding employment amongst graduates is field of study, with social science and applied humanities graduates having the highest proportions of unemployment and business/commerce graduates the second highest. Graduates who hold qualifications with a professional focus tended to have more positive labour market prospects than those with qualifications of a general nature. Pauw, et al. (2008) found that in terms of qualification type, the rapid increase in unemployment of those with diplomas or certificates rose from 7.9% to 13.2% between 1995 and 2005 and much of the growth in graduate unemployment can be attributed to the sharp rise in unemployment among these qualification types.

Unfortunately Moleke (2010) does not list which courses she classifies as having a general or professional focus. Similarly Pauw et al. do not stipulate which specific diploma and certificate courses they are referring to and from which higher education institutions they were obtained. Furthermore these authors do not attempt to explain their quantitative findings but tend to report the statistics at a descriptive level. It would be worthwhile to address, for example, why students from historically Black institutions, those who have studied certificates or diplomas, and those who have studied with general areas of focus have higher likelihood of being unemployed? Nevertheless, these studies indicate that in addition to race and gender, higher education institution attended, field of study and level of study are important contributors to our understanding of graduate unemployment.

These educational variables are in turn associated with other factors, for example, field of study is associated with parents' education as parents serve as both a guide and a role model to their children. For example, it is not uncommon for a lawyer's child to also study law, as parents and extended family can influence learners'[8] higher education choices. This is important as apartheid prevented many Blacks from studying courses with a professional focus and therefore Black students may be more likely to enroll in courses of a more general nature. Indeed it is not surprising that Moleke (2010) found that most Black students graduate in fields of study without a professional focus and that these fields yield the highest prevalence of graduate unemployment. Parents and family members not only influence career choice when entering higher education but also after graduation. For example, Watts and Fretwell (2004) report that in developing countries like South Africa, when older children leave higher education they are expected to contribute to the costs of sending younger siblings to school. Older children may not be encouraged to enter post-graduate studies as it is more beneficial to the whole family if they earn an income sooner rather than later. Therefore poorer families are more likely to produce certificate and diploma graduates, as these are relatively shorter

[8] 'Learner' is used to refer to a person in secondary education whereas 'student' refers to a person in higher education

qualifications, and these levels of study were reported by Pauw, et al. (2008) to drive the increasing graduate unemployment rate.

In a study on national unemployment, Mlatsheni and Rospabe (2002) found that having an employed family member increased the likelihood of young household member employment and conversely having unemployed family members decreased the probability of young household member employment. In relating the role of education to their results they reported that their findings indicate a "vicious circle where income disparities lead to educational attainment disparities, which in turn perpetuate existing income inequality" (Mlatsheni & Rospabe, 2002, p19). Additionally, when reviewing seven developing countries career development policies and practices, Watts and Fretwell (2004) reported that poor people may be drawn to accept any job in order to provide a source of income. In such instances poverty suppresses the concept of choice and leads career guidance (offered by higher education institutions) relevant only for those who are perceived to have choices. Kingdon and Knight (2005) found that, in South Africa, the unemployed who are not looking for work are significantly more deprived than those who are actively looking. They suggest that people's job search is hampered by poverty, by the cost of a job search specifically for people from remote rural areas, and by high local unemployment. Lack of capital also appears to be the primary constraint to entrepreneurship among the youth (Mlatsheni & Rospabe, 2002). These findings relate socio-economic status to one's ability to look for work, ability to apply for jobs and relative choice concerning employment options. Socio economic status in turn is related to household factors such as parents and siblings education and employment.

Relating to general literature on poverty amongst students, Dominguez-Whitehead (in press) reported that poverty results in food insecurity among students and that student loans often do not cover the cost of basic needs such as food, clothes and shelter. Morrison, Brand and Cilliers (2006) found that, in South Africa, Black students face high stress levels in adapting to tertiary education and that these students report financial difficulties as a prominent source of distress. This

reiterates the influence of poverty on students' experiences. I now look at the influence of finances when entering higher education.

The National Student Financial Aid Scheme (NSFAS) provides aid to financially needy students. This is at the core of South Africa's strategy to address inequality enforced during apartheid by increasing access to higher education for previously disadvantaged groups. In 2009, 93% of NSFAS loans were given to Blacks, 5% to Coloureds, 2% to Whites and 1% to Indians (National Student Financial Aid Scheme, 2013, January 7) providing evidence that financial constraints when accessing higher education is related to race, with Black learners using the bulk of the financial loans. In addition to inhibiting access to higher education, financial constraints also play a significant role in the high drop-out rate of South Africa students (MacGregor, 2007). A study on the expectations and subsequent experiences of students found that the largest gaps between the perceived importance and the perceived experience of a university service related to the scholarships available and fees (Gbadamosi & de Jager, 2009). The results revealed that the students' perceived experience is significantly lower than their considered importance of these services indicating that finances are a concern for some students. These studies provide evidence of the pervasive nature of lack of finances on learners' and students' experiences across a range of activities.

Taken together, poverty is an important area for further study. Relating to graduate unemployment, how poor graduates experience the job search process, the cost of looking for a job, and the role of other household members warrants further study. This will lead to a more holistic understanding of the influence of poverty on graduates' job search and resulting employment choices and prospects.

Another individual factors relating to employment is the process by which a graduate looks for and secures employment. Schoer, et al., (2012) point out that, in South Africa, gaining employment is a function not only of ones skills and personal characteristics but also the process through which employers and job seekers are matched. They investigated which company, household and individual characteristics are associated with the channels through which young South Africans find their first job. They identify three types of recruitment channels; *direct* channels

which involves the job seeker going form door to door of potential employers, through social *networks*, namely family and friends, and through *formal* channels, namely adverts. They found that the majority of employees had been recruited through social networks and those who were recruited through social networks reported higher number of employed household members, illustrating the importance of household attachment to the labor market. They note that employers hire people through networks for a number of reasons. According to Rankin, (personal communication, 25 January 2013), three of the most important reasons are firstly, it improves information that the employer has about the people - if you hire someone's brother it is likely that they will have a similar productivity level, temperament as so on, compared to some other person. Secondly, it cuts down on the costs in the screening of applicants. Thirdly, employers may recruit through networks for the monitoring function; if an employee brought someone to work at a company then they might make sure that the new recruit works hard in order to avoid a bad reflection on themselves. Schoer et al., (2012) reported that those employed through direct channels did not differ by education level compared with those who have never been employed. These studies raise household attachment to the labour force and individual job search strategies as important in the study of graduate unemployment.

Together these research findings provide evidence that family member's education, their employment status, and their socio-economic status influence leaners' access to higher education, students' experiences at their higher education institution and graduates access to the labour market and to resources required to look for work.

Having reviewed individual demographic and educational factors relating to graduate unemployment, I now look at factors relating to those who employ graduates, namely graduate employers and their graduate recruitment practices. Pauw et al. (2006) conducted a study in which they interviewed staff from 20 of South Africa's largest firms across a range of sectors, all of which employ graduates, asking questions around their graduate recruitment activities and practices. The authors reported that employers considered graduates to lack the required soft skills

(e.g. communication ability), work experience and workplace readiness required for the workplace. Employers also raised graduates' inability to deal with the interview process in a mature way and the lack of infrastructure to support graduate recruitment fairs at certain higher education institutions as reasons why they prefer to actively recruit graduates from only certain higher education institutions and not others. The employers were also fairly explicit in saying that these concerns relate particularly to graduates from historically Black institutions (Pauw et al., 2006; Pauw et al., 2008). While poor infrastructure at historically Black institutions is expected given the previous apartheid higher education system, these graduates inability to deal with interviews in a mature way raises some questions. For example, is interview training provided at historically Black institutions and if so, is the quality of this training inferior? And do graduates from historically Black institutions actually perform poorer in interviews than those from historically White institutions, or is this just a perception among some employers?

Relating to the quality of education, historically Black institutions received less funding and resources than their White counterparts, and although this has been systematically addressed in the past five years, discrepancies between institutions still exist. This is evident, for example, by the University of Johannesburg's 2011-2020 strategic thrusts. The University of Johannesburg, formed by the merger between two historically White institutions consisting of one campus each and one historically Black institution consisting of two campuses, has included as one of their eight strategic thrusts the attainment of equivalence of all campuses, with dedicated initial focus on the two formerly Black campuses (University of Johannesburg Strategic Thrusts 2011-2020, 2011). This alludes to differing resources and in turn quality of education at the various campuses and may indicate that graduate recruiters are somewhat correct in their perception that historically Black institutions produce lower quality graduates than their White counterparts. However, a study on graduate attributes from the employers' perspective (Griesel & Parker, 2009) reported that the degree to which the knowledge and skills that higher education sets out to develop is less out of sync with the needs of the employer than is commonly believed. Unfortunately Griesel

and Parker they did not report their results disaggregated by higher education institution and therefore it is not possible to use their results to either confirm or dispute the perception that historically Black institutions produce lower quality graduates in terms of the graduates education and skills.

On the other hand, Moleke (2010) reported that historically Black institutions provide an oversupply of Black graduates in fields with lower employment prospects and that most unemployed graduates were African and had qualifications in the social sciences and applied humanities. These are fields in which the growth in labour force entrant's outstripped growth in employment created, resulting in low absorption rates of these graduates. Therefore is it possible that the growth in unemployment can be attributed to labour force factors rather than the quality of education provided at certain institutions being below the level that recruiters require. After having raised these two points of possible causes of graduate unemployment, namely the quality of education at historically Black institutions and the labour force growth, it is important to clarify that these are not under investigation in this study. This study is interested in gaining the unemployed graduate's perspective in terms of the role of their higher education institution and their perception of the graduate recruitment practices. Therefore it looks at these findings from the unemployed graduate's point of view, not from the recruiter's point of view or from an economic perspective.

In concluding this part of the literature review, I concur with Koen (2006) in that researchers have not yet sufficiently explored links between higher education and the world of work. We know that the prevalence, characteristics and perceived causes of graduate unemployment relate to a plethora of interrelated demographic and educational variables of the individual, as well as to factors relating to higher education institutions and to those relating to graduate employers. However, we know relatively little about the relationship between these variables and the actual experiences of graduates when looking for work and negotiating employment.

In summary I identified these key areas for further study: what is the prevalence of graduate unemployment following the end of apartheid and the restructuring of the higher education system; what are the characteristics of the

unemployed graduates; what is the role of poverty on graduates job search process; and what is the role of the higher education institutions in providing career services?

I now look at literature specifically relating to the role of higher education institutions in providing career services to their students and graduates.

2.3 Role of the university in graduate employment

Unemployed graduates are a unique subsection of the unemployed youth population because they have studied at a higher education institution and graduated therefrom. Therefore, when studying graduate unemployment it is important to do so in the context of higher education institutions' role in providing career services to both their students and graduates alike.

Cliff (2003) stated that although many students arrive at higher education institutions underprepared for the challenges they will face, institutions have a moral responsibility to assist students they accept towards ultimate academic success. Here academic success refers to graduating but I pose the question, should ultimate success not refer to the employment of the graduate in a position and area that he/she can contribute to the overall prosperity and success of the country's economy?

As a result of only few studies being conducted on graduate samples, relatively little is known about higher education institutions' role is assisting graduates secure employment. Kay and Fretwell (2003) noted that the then 31 registered tertiary institutions in South Africa all had student counseling units in place and that these units typically offered career information, guidance and counseling services. More recently in 2010, Cilliers, Pretorius and van der Westhuizen (2010) conducted a national benchmarking survey of student counseling centres in South Africa and reported that the second most frequent problem students faced were career development issues. Therefore career services are offered by higher education institution's student counselling centres.

When comparing the constituency of the South African student counselling centres as indicated in Cilliers et al.'s (2010) report, to that of Gallagher's (2006) report, I see that that in South Africa student counseling services and student career services are usually grouped together in a single unit (with the exception of

University of Cape Town and Rhodes University). In America, however, counseling centres are separate to career centres as their scope of practice is seen as fundamentally different.

South African counselling centres, also known as Counselling and Career Development Units or Centres for Psychological Services and Career Development, typically hire psychologists and counsellors and they provide services based on the assumptions of therapy, most obviously that the psychologist is an agent of change in the students' development. Therefore, there is an assumption that career services can be delivered by counselors and psychologists. In reviewing career development services in seven developing countries including South Africa, Watts and Fretwell (2004) report that the delivery of career guidance is most often a labour intensive one-to-one service delivered by psychologists and that there is excessive emphasis on psychometric testing.

Based on a review of all of the South African public higher education institutions' websites and that reported by Cilliers et al. (2010), the current career services that higher education institutions offer are; (1) CV writing workshops, (2) mock interviews, and (3) job finding skills. In addition to this, some institutions also offer (4) career resource centres and (5) graduate recruitment fairs. Very few higher education institutions offer online career services. The first three services mentioned, namely CV writing workshops, mock interviews and job finding skills are based on the premise that given the required skills and training, graduates can effectively manage their careers. The skills they make reference to are ability to write a CV, the ability to perform in an interview and the ability to look for work. Interestingly, these first three services mentioned all relate to resources of the individual and fail to acknowledge structural factors within the environment that may affect employment prospects. This focus on the individual is not only evident in the career services discussed above but also in career guidance literature (e.g. Watts & Fretwell, 2004).

To date, the most comprehensive review of career guidance policies and provision, across seven developing countries including South Africa, was that conducted by Watts and Fretwell (2004). In their report they state that career

guidance can perform a valuable role in raising the aspirations of individuals in poverty by making them aware of opportunities and supporting them in securing such opportunities. Watts and Fretwell go on the say that career guidance emphasises the *'active individual'* and their ability to make decisions about their own lives. Furthermore they define career guidance services as those intended to assist individuals make occupational and educational *choices* and manage their career. It is clear from their review that to date, at least in developing countries, career development is approached from an individual perspective and I question the extent to which this approach is applicable given the role of household variables, higher education institutions' role and graduate recruiters' role, discussed in the literature review.

This observation aligns with one of the major limitations of mainstream approaches to psychology; that is the explicit and implicit assumption that the individual should be the focal point of change (Ahmed & Pretorius-Herbert, 2001). However, community psychology attempts to address this limitation by shifting focus from the individual to social structures and may therefore provide a framework for addressing graduate unemployment including, for example, factors relating to higher education institutions and to graduate employers, thereby shifting focus from the graduate themselves. Community psychology models challenge the mainstream psychological view that the individual is entirely responsible for their own fate, and therefore may provide a framework for understanding graduate unemployment with the appreciation of individual variables (such as educational level), family variables (such as socio-economic status), in the context of higher education (the various institutions' services and reputations) and in the context of graduate employment practices (such as recruiters only visiting historically White institutions for graduate employment fairs). A shift to a community psychology perspective could be a significant development in the study of graduate unemployment.

Based on these first three services it appears that higher education institutions believe that graduates will have the resources required to look for and apply for work, and that if the higher education institution ensures that graduates

have a CV and are prepared for an interview that the graduates will be able to apply for work and attend interviews themselves. In other words, there is an assumption that graduates have the all the resources required to look for work and that the job search process is the graduate's choice. However, it is likely that the resources required to actually look for work, namely access to job adverts usually via the internet or newspaper, money for printing and posting application documents, and transport to visit companies either to apply or to attend an interview are not available to many unemployed graduates suggesting an error in this assumption.

The fourth and fifth service offered by some, not all, higher education institution's counselling centres, namely career resource centres and graduate recruitment fairs, acknowledge the student within their context by providing services relating to resources and assess to graduate employers.

Career resource centers usually consist of a library of information on the world of work, industry and employer information, and computers that students can use for career related activities. These career resource centres provide students with the access to information, computers and to the internet required to conduct a job search. Taken together, service one through to four provide students with the tools and resources required to apply for work. They do not however acknowledge that (1) students still need to travel to the graduate employer's and (2) that often jobs are secured through networks (Rankin et al., 2007) and not through online applications.

The fifth service offered, namely graduate recruitment fairs, addresses students mobility to see graduate employers and the use of networks to apply for work to some extent. Graduate recruitment fairs usually entail graduate employers making onsite visits to higher education institution's campuses to advertise their company, their graduate vacancies and to conduct graduate recruitment activities. These activities include information talks to the students in which the employer informs students about the company and students are given an opportunity to have their questions answered. Sometimes the companies also hand out application forms or explicitly tell the students how to apply for work at their company. Companies sometimes also hand out information brochures with these details

included therein. Therefore the company comes to the student thereby eliminating the cost of the student visiting the company. It also provides the student with an opportunity to network with potential employers. However, as discussed previously, Pauw et al. (2006) reported that graduate recruitment fairs are only held at some higher education institutions as these fairs require specific infrastructure at the higher education institution, not available at historically Black campuses. Additionally employers often only attend these fairs at historically White institutions due to the high cost involved. Therefore while these fairs address contextual factors relating to graduate unemployment, they are only carried about at selected higher education institutions.

Together, the five career services commonly offered by higher education institutions appear to provide all the resources required for a student to become employed. These are a CV, interview skills, access to information and access to employers. However, because of the assumption that the individual is responsible for their fate, there is excessive emphasis on the individual and a failure to address structural inequality so prevalent in South Africa. These services do not appraise social reality as a dynamic and context specific. By viewing the individual as responsible for their own employment prospects there is oversight of factors and interventions at the community level that could explain why certain groups of graduates have higher prevalence of unemployment compared to others. For example, the discriminatory recruitment practices of graduates employers results in a situation wherein historically Black institutions are disadvantaged as their students only receive services relating to the individual, namely CV writing, interview skills and job searching workshop, and not services relating to their context such as the resources required to look for work, mobility to visit companies and opportunities to build networks with potential employers. The result thereof has, to my knowledge, not been investigated and reported in South Africa.

Lastly, and of utmost importance, all career services offered by higher education institutions are only available to registered students and not to graduates. Therefore, there is either an assumption that graduates will have access to the required resources needed to look for work, namely newspapers, a computer, the

internet, a printer and transport mobility, when they leave the higher education. Alternatively higher education institutions may not view themselves as responsible for providing career services to graduates or for assisting them to gain employment.

Key questions following from the review of career services higher institutions offer are; (1) can graduates access all of the resources required to find employment once they have left the university, (2) do higher education institutions view their career services role as extending to graduates, (3) how do higher education institutions' career services measure their effectiveness of their service if not ultimately by the employment of their graduates and (4) what is missed in our picture of graduate unemployment by the excessive focus on the individual and a failure to appreciate the graduate in their context? This research attempts to address these questions.

2.4 Conceptual framework

To end the literature review I provide a framework from which this research is approached. This research is not approached from a specific theoretical framework but rather with the intention to enhance current understanding of graduate unemployment through the provision of a revised conceptual model. "Conceptual models differ from theory in that they are not usually concerned with global classes of behavior but with specific types of behavior in specific contexts" (Earp & Ennett, 1991).

The central point of my model is graduate unemployment in South Africa and I attempt to both confirm and expand on findings in the current literature. Confirmation is necessary given that a large body of South African graduate unemployment research was conducted on samples who graduated either before the end of apartheid or before the restructuring of higher education system and therefore do not reflect the current higher education environment in South Africa. Reported research has also been dominated by quantitative methods and univariate analysis. This research included both multivariate analysis and qualitative research. Expansion is necessary as in a paper reviewing the existing graduate employment research in South Africa, Koen (2006, p.2) wrote that "the central issue that emerges from the analysis is that studies do not add much value to our knowledge about

graduate employment or unemployment patterns because different result sets often merely confirm each other" and "in some aspect governments, institutions, professional bodies and academics do not have a strong empirical base for understanding labour market dynamics or considering educational and employment strategies" (p.13).

Currently graduate unemployment is understood and researched with reference to youth unemployment in South Africa. This is expected as most recent graduates are youths. Interestingly, to date, very little recorded research has looked at graduate unemployment with regards to the role of higher education institutions, the very aspect that makes graduates a unique subset of the youth population. This research has done so. Existing graduate unemployment is also often contextualised within the history of apartheid in South Africa, which disadvantaged the non-White population, as well as, in terms of the restructuring of the South African higher education system during 2003-2005 in which historically White and historically Black institutions where merged to form a new de-racialised higher education system. The aim of this restructuring was to address inequalities of the past by providing equal education and labour market opportunities for all the race groups and genders.

Prevalence, characteristics and causes of graduate unemployment well reported in the literature relate to factors of the individual, those of graduate employers and those relating to the labour market. In this research, factors relating to the labour market are not measured, in order to keep the research focused. Rather there is an attempt to measure factors relating to the higher education institution that impact on graduate's unemployment experiences, as this aspect of the graduates' context is often overlooked.

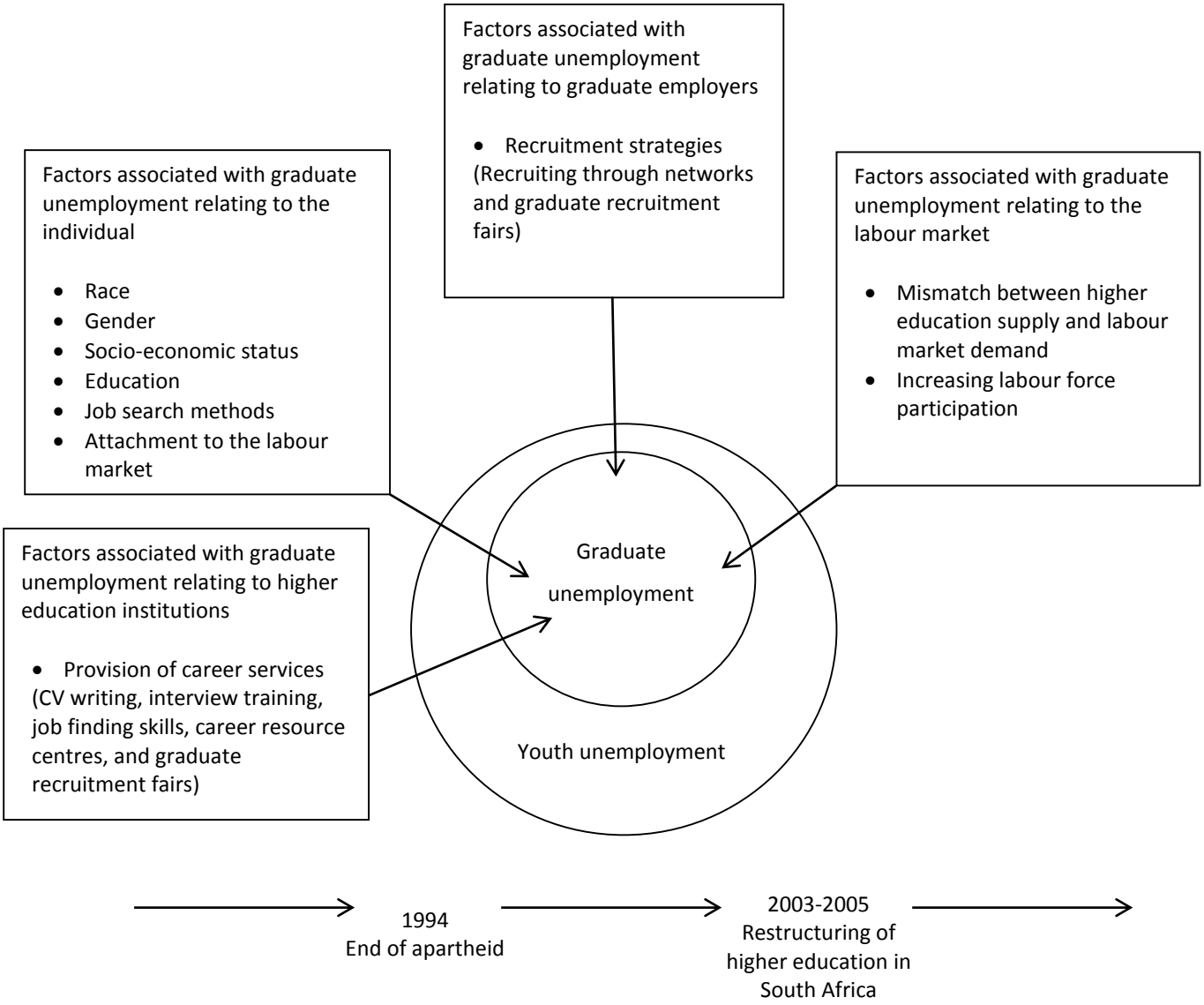
Relating to the individual race, gender, socio-economic status, education, job search methods and attachment to the labour market are fairly consistently mentioned. Most commonly Black, female, low socio-economic status graduates have the highest prevalence of unemployment. Relating to the individuals' education, usually those with lower levels of education in fields of study without a professional focus are most commonly unemployed. Regarding individual job search, most graduates find employment through networks and these networks are

related to the number of employed household members as this is an indicator of the graduates' attachment to the labour market.

Contextual factors of graduate unemployment related to graduate employers consist of the employers' recruitment strategies such as utilizing graduate recruitment fairs and existing employee networks. Graduate recruitment fairs are a primary way for graduate employers to recruit graduates and often these fairs are only carried out at historically White institutions due to the high cost of conducting on campus recruitment drives and the availably of the infrastructure required at the various university campuses. Furthermore, employers have reported that the quality of education attained from historically Black institutions is inferior to that attained through historically White institutions and therefore they prefer to recruit graduates from historically White institutions (Pauw et al., 2006). Recruitment research (e.g. Schoer, et al., 2012) has confirmed that most jobs are secured through networks and that employers prefer this method of recruitment for a number of reasons, mentioned earlier.

Lastly, two most commonly reported labour market factors that relate to graduate unemployment are the skills mismatch between the higher education supply and the labour market demand, and the increasing graduate labour force participation out-growing the demand for graduates in the labour market. This aspect of the conceptual model is presented below as it is prevalent is unemployment literature, however, it is not addressed in this research. The existing conceptual framework summarised above, and from which this research is approached is shown in Figure 2.

Figure 2: Graduate unemployment conceptual model



In addition to studying the factors outlined in the conceptual model above, I aim to appreciate the prevalence, characteristics and perceived causes of graduate unemployment from a community based perspective. That is to understand how factors of the individual, namely their demographic and educational factors, interact with factors in their environment, namely their higher education institution and the graduate recruitment market, to result in a situation wherein graduates find themselves unemployed. Community psychology, focuses on the relationship or interaction between the individual and his or her environmental or social context

(Seedat, Duncan & Lazarus, 2001) and therefore provides a suitable lens from which to study graduate unemployment.

This following list of findings from previous research highlight the need for researchers to challenge the assumption of individual choice in graduate's career trajectory (as mentioned by Watts and Fretwell, 2004) and to look at structural factors associated with graduate unemployment.

- Graduate recruiters are concerned with the quality of graduates from historically Black institutions and this influences their recruitment practices (Pauw et al., 2006).
- Higher education institutions provide an oversupply of graduates in fields with lower employment prospects (Moleke, 2005, 2010).
- Having employed family members increases the likelihood of young household member employment and conversely having unemployed family members decreases the probability of young household member employment (Mlatsheni & Rospabe, 2002).
- The unemployed who are not looking for work are significantly more deprived than those who are actively looking and people's job search is hampered by poverty (Kingdom & Knight, 2000b).

These four findings all relate to factors outside of the graduate's control, namely graduate recruitment practices, higher education enrollment, family employment and poverty, and therefore provide evidence that the study of graduate unemployment should acknowledge and appreciate the broader socio-political context in which graduate unemployment exists.

The implications of addressing this research from a community psychology perspective include: (1) the ability to appreciate the relationship between factors associated with graduate unemployment, and (2) the ability to move from a remedial approach to graduate unemployment to a preventative strategy. The ability to appreciate the relationship between factors associated with graduate unemployment is important as it shifts the focus of the study from the individual graduate to the graduate within their context. This explanation of the relationship between factors is a primary driver of this studies design whereby the interview

findings are aimed at explaining the survey results. Furthermore, in studying the unemployed graduate within their context it is possible to identify preventative interventions to reduce the prevalence of graduate unemployment rather than measuring the prevalence of graduate unemployment ex-post facto. Therefore there is a shift from understanding the unemployed graduate to understanding students who are vulnerable to unemployment before they are unemployed. This has significant practical value for both higher education institutions' career services and graduate recruitment services as they can modify their practices to assist student groups who are known to be vulnerable to unemployment before they graduate and become unemployed graduates.

2.5 Summary of the research gaps

In light of the literature and the conceptual framework, a number of gaps in the current understanding of graduate unemployment in South Africa become evident;

1) Several studies define 'high' or 'growing' graduate unemployment as the main concern, however, only two were published in the previous seven years (Koen, 2006). Similarly since 2006, few studies have been published on the prevalence of graduate unemployment and in addition to this paucity of research on graduate unemployment, published studies most often lack of a definition of what a 'graduate' is. This gap informed the first research objective, namely to measure the prevalence of graduate unemployment in South Africa using a large sample who represent all the 23 public higher education institutions with an explicit definition of the term 'graduate'.
2) The characteristics of graduates in South Africa have changed dramatically since the end of apartheid in 1994 and since the restructuring of the higher education system from 2003-2005. With this the characteristics' of unemployed graduates has also changed. Ongoing research, such as the current study, is required to both track and explain these changes. Therefore the second objective of the study is to measure the demographic and educational characteristics of the unemployed graduates sampled.
3) The characteristics of unemployed graduates are predominantly studied and explained using surveys and univariate analysis. Therefore, the interaction

between characteristics and the overall variance in unemployment explained by these characteristics has, to my knowledge, not yet been reported. Additionally, to my knowledge, the perceived causes of graduate unemployment from the unemployed graduates' point of view has not been reported. This is necessary as listening to the graduates' themselves could both deepen our understanding of graduate unemployment and allow new perceived causes and explanations to emerge. Therefore the study adopted a mixed methods approach with the intention for the qualitative findings to help explain the quantitative results and in doing so deepen our understanding of graduate unemployment.

4) A lack of evidence exists regarding the long-term effects of career services, such as career guidance, provided by higher education institutions. Furthermore, due to the assumptions of career guidance, and the focus on the individual student, structural factors in the environment affecting graduates employability have not been sufficiently studied. This gap informs the fourth research aim, namely to explore the role of higher education institutions career services from the unemployed graduates perspective.

Chapter 3: Method

3.1 Design

I designed the study with an appreciation of both quantitative and qualitative approaches. From the survey I wanted both generalisable data as well as a sampling strategy for the qualitative interviews. From the interviews I wanted explanations of the survey findings in the form of a deeper and richer understanding of the graduates' experiences of unemployment and its perceived causes. Therefore I adopted a mixed methods design. According to Green, Caracelli and Graham (1989) the underlying rationale for mixing methods was *complementarity ;* that is to measure overlapping but also different facets of the same phenomena. However in hindsight *expansion* was also evident; that is increasing the scope of the enquiry. In addition to this I aimed to address achieve *significance enhancement*, in other words facilitating thickness and richness of data (Collins, Onwuegbuzie & Sutton, 2006).

Creswell (2003) noted three further questions that should be considered when designing a mixed methods study. The *implementation sequence* for this study was sequential with the quantitative component being conducted first. This was primarily because the survey provided a sampling frame for the interviews as the groups of graduates who reported unemployment most frequently were chosen as interview participants. Equal *priority* was assigned to the quantitative and qualitative components of the research with focus placed on integration of the results. The *stages of mixing* were in the data collection stage where both survey data and interview data was collected and in the interpretation and reporting of results in which participants' reports of the perceived causes of graduate unemployment and the role of their university are seen in light of the quantitative findings. The design is primarily a *sequential explanatory design* (Barnes, 2012). This design involves two phases – a quantitative phase followed by a qualitative phase whereby the latter qualitative phase is used to explain the results of the first quantitative phase (Barnes, 2012).

In this study the prevalence and characteristics of graduate unemployment (research objectives one and two) were measured using the survey followed by interviews to explain these findings and relate them to the role of higher education

institutions in providing career services (research objectives three and four). In hindsight the design yielded new insights into the phenomena and therefore it could be argued that it was both explanatory as well as exploratory.

3.2 Sample and sampling

For this study, a graduate was defined as someone whose highest qualification was obtained from one of South Africa's public higher education institutions. 21 981 email addresses of students who graduated from all 23 Public Higher Education Institutions in 2009, 2010 and 2011, in both undergraduate and post-graduate qualifications were obtained, on disk, from an independent research company called Magnet Communications. Magnet Communications conducts employer branding research at all of the public higher education institutions annually, and their research does not extend to private higher education providers. My relationship with Magnet Communications is that I worked with them for one year between 2010 and 2011, as a consultant. The project I worked on involved developing a graduate recruitment program for them.

Based on this relationship I was given access to their student database. They gave me permission to use these email addresses of their research participants, for three years of their research, and only of participants who had consented to being contacted further for research purposes. These participants had filled in Magnet Communication's survey, either online or on their university campus. Although these participants gave consent to Magnet Communications, the guidelines for provision of confidential information from one practitioner to another, outlined by the Health Professionals Council of South Africa (HPCSA) were adhered to. This is discussed in the ethics section.

A breakdown of the sampling frame by race, gender, field of study is available as Appendix 2. Of the 21 981 people who were emailed the survey, 2662 people responded and 2029 responses made up the final sample. I received responses from people who had not studied in South Africa, who had not studied in 2009, 2010 or 2011 and who had not previously taken part in research by the independent research company. Therefore some people received my survey unintentionally and of these some chose to respond while others didn't. For this reason the final sample

consisted of people who graduated before 1990 and up to 2011, with the majority (72.5%) graduating between 2006 and 2011. Comparing my final sample to the graduates of 2007 reported by the Council of Higher Education (2009) we see that my sample over-represented males, Whites, graduates from comprehensive universities, science, technology and engineering graduates and post-graduates while under-representing Blacks, universities and human and social science graduates. A sample size calculation using the approximate graduate population over a 5 year period, with 1% error and a confidence interval of 4, yields a required sample of around 1040. Therefore my large sample may lead to more significant findings than would be found with a smaller population. For this reason the p-value is reported in conjunction with odds ratios and confidence intervals. Overall I was satisfied with the quantitative sample and as it represented all 23 public higher education institutions in South Africa, with good spread across educational and demographic variables and enough variation in employment status.

In choosing the qualitative sample I used both homogenous and criterion sampling (Onwuegbuzie & Collins, 2007). The criteria were respondents, who (1) consented to being contacted further, (2) were unemployed and looking for work, (3) were Black, and (4) were in the lowest two socio-economic status groups. Criteria three and four created a homogenous sample allowing me to focus on the perceived causes of unemployment among Black and poor graduates. These variables by which the filter was done were chosen because they showed the highest odds of respondents being unemployed and looking for work compared to respondents from the other four employment statuses in the quantitative analysis. As only 13 graduates were in the lowest socio-economic status group, respondents in the second lowest socio-economic status group were added to the qualitative sampling criteria.

Twenty graduates who met the four criteria above were either emailed or sent a text message, depending on the contact details that they provided, and asked to participate in a 30 minute telephonic interview. Ten participants replied and were interviewed. Unfortunately the qualitative sample was small relative to the

quantitative sample and the implications thereof are raised in the discussion section of this report.

3.3 The instruments

I developed the survey through reviewing questionnaires and surveys used in other graduate employment research and including items on variables discussed in my literature review in line with my research objectives. The survey questionnaire (Appendix 3) was then drawn up in an online survey platform. The online questionnaire was piloted on 18 graduates to ensure clarity of the introduction and directions, that the definitions provided were sufficient, that the question sequence functioned correctly, that the questions and answer options were clear and valid and the average duration it took to answer the survey. The following changes were made to the questionnaire as a result of the pilot.

- 'Age' range changed from 18-50 years to a drop down menu with 0-100 years as answer options
- 'Date qualification was obtained' changed from year 1995-2011 to a drop down menu ranging from 1980-2011
- 'Marks obtained in final year' was removed for PhD graduates
- 'Funding received' was changed from a single answer option to multiple answer options
- 'Private organization/individual' was added as a response option to the question 'who did you receive career guidance from?'
- 'Number of dependents' was removed
- 'Do you receive financial support?' was added
- 'I wish to be contacted further' and 'I wish to be sent the results' were added
- 'Rating of English ability' was removed for first language English speakers

3.4 Variables

The following three tables describe the variables in the study. Table 1 describes the dependent variables, Table 2 the independent demographic variables and Table 3 the independent educational variables.

3.4.1 Dependent variable

Table 1: Dependent variables, their description and scale of measure

Name	Description	Scale of measure
Employment status	The dependent variable in study was employment status. Three groups categorised the employed; those who are self-employed, those employed on a full-time basis and those employed on a part-time basis. Two groups, those who are currently looking for work and those who are not currently looking for work categorised the 'unemployed'. The employment variables were defined in the survey as follows: - Employed full-time: Employed for 35 or more hours per week. - Employed part-time: Employed for less than 35 hours per week. - Self-employed: Primary employment is self-generated and self-sustained. - Unemployed and not looking for work. - Unemployed and looking for work.	Categorical
Under-employment	Respondents who reported being self-employed, employed full-time or employed part-time were additionally asked whether they considered themselves to be underemployed. Underemployment was considered both in terms of skill and time. These variables were defined in the survey as: - Underemployed refers to an employment situation that is insufficient in some important way for the employee. Examples include holding a part-time job despite desiring full-time work, and over-qualification, where the employee has education, experience, or skills beyond the requirements of the job. - Underemployed by skill: Currently employed but the work that you do is significantly below your skill level. - Underemployed by time: Currently employed part-time and you are available and willing to work more hours per week.	Categorical

Duration of un-employment	There seems to be consensus that the longer someone remains unemployed for, the less likely they are to secure employment, therefore those who reported being unemployed were asked how many months they have been unemployed for; 0-3 months, 3-6 months, 6-9 months, 9-12 months, 12-15 months, 15-18 months, 18-24 months or more than 2 years.	Ordinal

Although there are conceptually three dependent variables in the study, namely employment status, underemployment and duration of unemployment, only employment status is used as the dependent variable in the majority of the analysis. The remaining two dependent variables aimed to indicate whether underemployment is an area for further study and whether duration of unemployment influences graduates' employment prospects.

3.4.2 Independent variables

The independent variables in the study were those shown in the literature to be important contributors to understanding youth and graduate unemployment. Specifically they relate to education, socio-economic indicators and access to resources required to look for work. They included both demographic and educational variables and are described in the following two tables.

Table 2: Independent demographic variables, their description and scale of measure

Name	**Description**	**Scale of measure**
Race and gender	Race and gender are possibly the most reported variables in the unemployment literature. Race was measured according to categories commonly used in South Africa. They are Black, Coloured, Indian and White. Due to the sensitive nature of race categories there was an additional category for 'other' and an open field. Interestingly a number of people chose other and filled in 'South African', possibly indicating their resistance to the currently used categories. Gender was catergorised as male or female.	Categorical

Socio-economic status	Socio-economic status was measured in four categories namely 'not enough money for basic things like food and clothes', 'have money for food and clothes but short on many other things', 'have money for most important things but few luxury goods' and the highest category 'some money for extra things such as going away on holiday'. These are crude categories and are used only as indicators of respondents' socio-economic status.	Ordinal
Area	Participants were asked whether they have spent the majority of their lives in a rural or an urban area. Area is significant as many South Africans migrate from rural to urban areas in seek of jobs and rural areas commonly have a higher unemployment rate.	Categorical
Language	Participants were asked what their first language is and given the nine official languages as response options namely Afrikaans, English, IsiNdebele, IsiXhosa, IsiZulu, Sesotho sa Leboa, Sesotho, Setswana, SiSwati, Tshivenda and Xisonga and 'other' with space to fill in their first language. In addition to this they were asked whether English is their first, second, third, fourth or fifth language.	Categorical
Age	Participants filled in their age on an ordinal scale from 0-100. Age was then grouped into three categories of 15-24, 25-30 and 31-35, as is done by statistics SA to categorise the youth. There were no respondents aged 15-19 so this category was relabeled 20-24. As 'youth' is often defined in South Africa as those up to and including 35 years of age, participants older than this were removed from the data.	Ordinal
Access to resources	Participants were asked whether they can access various resources required to conduct a job search. These resources are a telephone, newspapers, a computer, an email account and internet. They responded 'yes', 'yes with some difficultly' and 'no' to these questions.	Categorical

Family details	The participants' parents' highest level of education was measured according to ordinal categories namely; having completed primary school, having completed some high school, having completed high school, having completed tertiary education and 'I don't know'. 'Mother' was defined as mother or most prominent female caregiver and father as their father or most prominent male caregiver. Participants were asked if they had a family member who was self-employed and if they have a family member who is unemployed and currently looking for work. They responded yes, no or I don't know. Regarding financial considerations, they were asked if they had any dependents (yes/no) as well as if they receive any financial support. They responded no, yes or sometimes but not regularly to this item. Family details give insight into the household structure, which in turn has implications for attachment to the labour force and employment prospects.	Categorical

This concludes the demographic variables measured in the study. The following list outlines the educational variables measured.

Table 3: Independent educational variables, their description and scale of measure

Name	**Description**	**Scale of measure**
Highest qualification	Highest qualification can be argued to be an ordinal variable given that the entry requirements generally increase with the perceived rise in education level. That is, the Grade 12 application point score required for undergraduate studies are generally lowest for a certificate, followed by a diploma and then a degree. Entry level for post-graduate courses usually requires completion of the previous level. In other words a student must have done a degree in order to apply for an honors degree, they must have completed an honors degree in order to apply for a master's degree and they must have completed a master's degree in order to apply for a doctorate degree. The only exception to this is a post-graduate certificate or diploma whereby numerous courses are offered at various education levels. Further justification for education as an ordinal scale of measure is that education level has been aligned to the National Qualifications Framework and the NQF levels assigned are lowest for diplomas and highest for doctorate degrees. However, an alternative argument can be made that the different education types differ fundamentally	Ordinal

	and therefore cannot be ranked. In this study education level was treated as an ordinal scale of measure. Highest qualification was measured in the following ascending order; certificate, diploma, degree, honors degree, master's degree, doctorate degree and 'other'. Post-graduate certificate/diploma was most frequently reported in 'other' and this was then added as the highest qualification. In the analysis the position of post-graduate certificate/diploma was moved around as it can occur at any level of qualification. However there were no significant changes in the results regardless of where amongst the post-graduate courses post-graduate diploma/certificate was placed.	
Graduation year	Graduation year was collected as an interval scale of measure from 1980 to 2011. After data collection this variable was ordered into categories namely; before 1990, 1991-1995, 1996-2000, 2001-2006 and 2006-2011.	Categorical
Marks	Employers often only have the graduate's marks as an indication of their competence or skill (Pauw, et al., 2006), therefore, in addition to the type of qualification, graduates were asked what their average final year marks were for their highest qualification; 40-49%, 50-59%, 60-69%, 70-79% and 80% and above. This was not asked of doctorate graduates, as they generally do not receive a mark. Marks were treated as an ordinal scale of measure however they showed non-significant results.	Ordinal
Field of study	Field of study is a categorical variable and the categories were drawn up through a review of the 23 public higher education institutions' faculties and courses on offer as indicated on their websites. The fields were; arts, business, commerce or management, education, engineering or technology, health sciences, humanities, law, sciences and other. Few participants chose 'other' and I was not able to recode this category due to the dispersed mix of courses.	Categorical
University type	South Africa has 23 public higher education institutions. This is made up of 11 universities, 6 comprehensive universities and 6 universities of technology. Universities of technology mostly offer certificate, diploma and advanced diploma courses. Universities offer degrees and post-graduates degrees. Comprehensive universities offer a combination of all of these courses. A list of the higher education institutions and their category is available as Appendix 1. In addition to these 23 public higher education institutions was the category 'other'. Those respondents who studied abroad or at a private higher education institution were removed from the sample as	Categorical

	they are not publically funded and private institutions are not as closely governed by Higher Education South Africa, although they are required to be registered and accredited.	
Skills and university ratings	Given that English and ICT skills were identified as an important graduate attribute by employers (Griesel & Parker, 2009; Schoer, et al., 2012), those who did not rate English as their first language were asked three additional questions namely: how would you rate your ability to read in English, how would you rate your spoken English ability, and how would you rate your written English ability. They responded poor, below average, average, above average or excellent. All respondents were asked to rate their overall computer literacy and ability to use the internet by the same categories as above. Respondents were also asked to rate the skills they obtained from their university as well as the usefulness of their qualification compared to other qualifications. For skills obtained they responded with poor, below average, average, above average or excellent. For usefulness they responded less useful, equally useful or more useful. This variable is intended to ascertain whether graduates have differing views of the quality of education higher education institutions offer, as employers have been shown to have (e.g. Pauw et al., 2006 & Moleke, 2003).	Categorical
Career guidance	The dearth of career guidance literature implies that given the required career guidance a student should be able to manage their career effectively. Therefore participants were asked if they have ever received career guidance, either formal or informal and they responded with either yes or no. Those who responded 'yes' were further asked who they received career guidance from, what the purpose of seeking career guidance was and if the career guidance they received was helpful or not. The answer options for who they received career guidance from was school teacher, university counselor or staff member, private individual or organization, family, friends or other. The reasons for seeking career guidance was assistance choosing high school subjects, assistance choosing tertiary subjects, assistance with writing your CV, assistance with interview preparation, assistance with job hunting, it was compulsory at high school and other. Answering if they found the career guidance useful they answered yes, somewhat, not really or no.	Categorical
Funding	Funding was grouped into five categories namely; self-funded, family funded, funded by a loan taken out by yourself or a	Categorical

	family member, funded by a bursary and 'other'. Within the 'other' option there was allowance to specify the funding. Participants could respond to numerous categories at once. In understanding graduate unemployment, funding is associated with race and socio-economic status with the majority of Black and low socio-economic status students requiring government funding.	
Work experience	Unemployed respondents were additionally asked if they had any work experience and those who did have work experience were asked two further questions. Firstly, how many months work experience they had with response options according to the same categories for unemployment duration. Secondly, if their work experience is related to their qualification or not. Finally they were asked how many jobs they apply for per week; less than 1, 1-5, 6-10, 11-15, 16-20 or more than 20. These variables were considered important because Pauw et al. (2006) reported that employers perceive graduates to be unprepared for the workplace and it is reasonable to infer that those with work experience have acquired some skills required for the workplace.	Categorical

3.5 Procedure and analysis

Participants were emailed an invitation to participate in this research and were given a link where they could complete an online survey within a six week period. The email served as the participant information sheet (see Appendix 4) and included information on the purpose of the study, an invitation to take part and a consent form. Consent was obtained in the first question of the survey. If the participant did not consent to take-part in the study, the survey did not continue. 2662 responses were obtained. Before analysis the following participants were removed from the dataset

- Those who did not report where their highest qualification was obtained,
- those who did not complete their highest qualification in a South African public higher education institution,
- those without a South African work permit (seen in question 27 of the survey),
- those who did not report their employment status,
- those aged 36 years and older.

Removing these participants was chosen over imputing values as the sample size was larger than that required by the formal sample size calculation. After the above mentioned respondents were removed, the final surveyed sample consisted of 2029 participants.

Their responses were analysed using frequency distributions, chi-squared analysis in the form of 2x2 contingency tables, odds ratios and binary logistic regression as these are appropriate techniques for categorical data. Due to the large sample size and the multiple significance tests run, the confidence level set at 99% and odds ratios in addition to the statistical significance are reported. The binary logistic regression results reveal the proportion of variance explained by multiple independent variables on the dependent variable, namely employment status. The assumptions of the independence of observations and minimum number of observations in each cell for contingency tables were met. A possible limitation to the statistical inferences lies in the non-random sampling method used.

Ten graduates agreed to be interviewed. I conducted their interviews over the telephone at a time and date proposed by the participants. Telephonic interviews were chosen over other qualitative data collection techniques as the participants lived a distance from both myself and from each other. Therefore this was the most cost and time effective way of collecting information. The duration of the interviews ranged from 25 to 45minutes. Even though I had an interview guide (Appendix 5) and asked the same broad guiding questions in each interview, participants were encouraged to say whatever came to mind at any time. Some issues emerged in this way without having been directly asked or probed by myself. The interviews were audio recorded and thereafter transcribed in full, using pseudonyms. Initially all interesting aspects of the data were coded across all the interview transcripts. Thereafter, the codes were collated into themes that address the four research aims and the key questions raised following the quantitative analysis. Therefore the final themes represented here reflect patterns across the entire data set and they capture important aspects of the data in relation to the research questions. Extracts chosen to represent these themes were then

transcribed in more details using some Jeffersonian symbols (Jefferson, 2004) in order to portray the conversations more accurately.

3.6 Ethics

Prior to this research, the sample participated in a Magnet Communications survey in which they supplied their contact details to Magnet Communications and consented to being contacted further. The Magnet Communications survey did not give any information about the types of possible research these participant were consenting to be contacted further for, or who could be conducting this further research. The Magnet Communications survey simply included the item 'Do you consent to be contacted for further for research purposes', with two response options: yes or no.

According to the Health Professionals Council of South Africa (HPCSA), information about participants can be used for research purposes. Their ethical guidelines for best practice relating to providing client information state that researchers have a duty to (i) protect the privacy of patients and (ii) respect their autonomy (HPCSA, 2008).

In accordance with point (i) above, ideally Magnet Communications should have contacted the research participants first, introduced them to my study, and obtained specific consent for their contact information to be given to me. However they did not do this and rather gave me the contact details of the participants who had answered 'yes' to the consent item stated above. Therefore I contacted the participants directly via email. In this email, sent from my personal university email address to the sample, the Magnet Communication survey participants were invited to participate in my study and given information about the study (Appendix 4). In this email they were provided a link to the online survey. They were also given my, the researchers, email address and were encouraged to email me with any questions they may have or if they required further information. Some participants did so and I replied to their emails. On opening the survey link provided in the email, the following text appeared and participants chose one of the consent options.

> I consent to participation in this study and understand that there are no benefits for participating in this study. My results are confidential; however, direct quotations

from my questionnaire may be published in an academic journal along with the final results of the study. In such a case I will be assigned a pseudonym that will protect my anonymity. I understand that the data will only be viewed by the researcher, Kim Baldry, and her supervisor, and will be kept under password protection at all times. I may be contacted at a further stage for more information.

- I consent
- I consent to partake in the study but not to being contacted further
- I consent to partake in the study but not to direct quotations being used
- I consent to partake in the study but not being contacted further or direct quotations being used
- I do not consent and will not partake in this study

Therefore the people contacted had a choice whether to participate in my study or not, and they were provided with necessary information to make this choice. They could also ask any additional questions before deciding whether to participate. In this paper results are reported on group level and no personal information is disclosed. In these ways the participants' privacy and autonomy are respected, thereby meeting both of the HPCSA's criteria. In addition to this, before any work commenced on this study, a university ethics committee reviewed the research proposal and permission was granted to continue with the study. The university ethics clearance certificate is provided in the appendices as Appendix 6.

For the interviews, participants were emailed and SMSed an invitation to be interviewed. Those who agreed were contacted telephonically at a time proposed by them. Before the interview began, the purpose of the interview, the approximate length of the interview and the rights of the participant were explained. These included confidentiality, the right to refuse to answer any question and the right to withdraw from the research at any time. The survey data, interview recordings and interview transcripts have been stored in password protected files on my computer. These steps taken during the interview process ensured that interviewed participants' rights were upheld.

Chapter 4: Results

This section reports all of the survey results followed by selected interview results. Thereafter, important findings from both are integrated and discussed in Chapter 5.

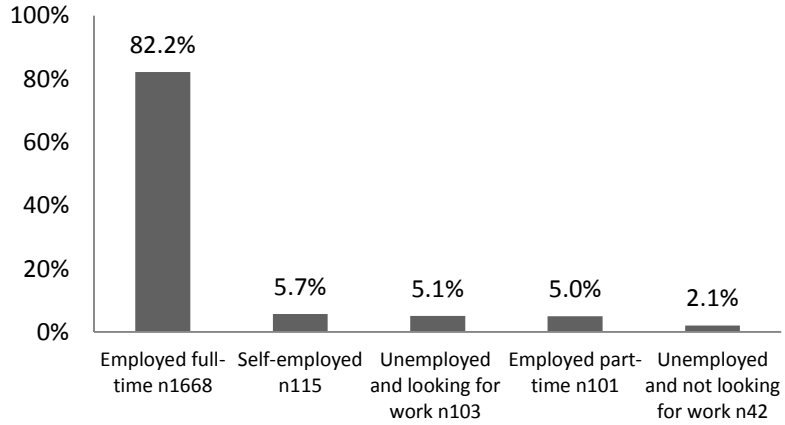
4.1 Survey results

4.1.1 Prevalence

As seen in Figure 3, the prevalence of graduate unemployment of those who are looking for work in this sample is 5.1%. This is slightly less than the StatsSA 2011 and 2012 figure of 6.3% and 5.9% respectively and Moleke's 6% reported in 2005. It is well below van der Merwe's (2009) estimate of 36.2%. As mentioned previously, my sample over-represented males, Whites, and post-graduates. In previous research these groups have generally had lower prevalence of unemployment. Therefore my results are likely to indicate a conservative prevalence of unemployment.

Figure 3: The employment status of the full sample

Figure 3



Demographic variables' frequencies

As I am primarily interested in graduate unemployment among those who are currently looking for work, and not those who have chosen to be unemployed, throughout the quantitative findings I have compared the group who are unemployed and looking for work (103, 5.1%) to the other four employment statuses. This group is sometimes referred to simply as 'unemployed' rather than

the full description of 'unemployed and looking for work'. No-where in the results does unemployment also refer to the group who are unemployed but not looking for work. Table 4 shows the full sample broken down by the independent demographic variables and Table 5 the full sample by the independent educational variables. These frequency tables are provided to portray an overview of the full sample and their employment status. Significant analysis results follow.

Table 4: The sample by independent demographic variables

	Full Sample N=2029 (percentage)	Unemployed and looking for work sample N=103 (percentage)
Gender		
Female	913 (45%)	58 (6.4%)
Male	1116 (55%)	45 (4%)
Race		
Black	589 (29.5%)	70 (11.9%)
Coloured	122 (6.1%)	3 (2.5%)
Indian	190 (9.5%)	6 (3.2%)
White	1098 (54.9%)	24 (2.2%)
Socio-economic status		
Not enough money for basic things like food and clothes	71 (3.6%)	13 (18.3%)
Have money for food and clothes but short on many other things	315 (15.8%)	24 (7.6%)
Have money for most important things but few luxury goods	579 (29%)	38 (6.6%)
Some money for extra things such as going away on holiday	1035 (51.8%)	26 (2.5%)
Area		
Urban	1723 (86.2%)	75 (4.35%)
Rural	277 (13.9%)	26 (9.4%)

English is your…		
1st language	772 (38.1%)	22 (2.8%)
Not your first language	1252 (61.9%)	81 (6.5%)
Age		
20-24years	333 (21.6%)	37 (11.1%)
26-30	743 (54.2%)	53 (6.7%)
31-35	331 (24.2%)	12 (3.5%)
Newspaper access		
Yes	1947 (98.6%)	90 (4.6%)
Yes with difficulty and no	28 (1.4%)	9 (32.1%)
Cell phone access		
Yes	1962 (99.3%)	97 (4.9%)
No	13 (0.7%)	2 (15.4%)
Computer access		
Yes	1958 (99.3%)	92 (4.7%)
Yes with difficulty and no	13 (0.7%)	5 (38.5%)
Internet access		
Yes	1924 (97.7%)	87 (4.5%)
Yes with difficulty and no	45 (2.3%)	10 (22.2%)

Percentages in column three are relative to the specific variable level. Therefore percentages below 5.1% indicate less prevalence of unemployment than in the overall population. Conversely percentages over 5.1% indicate above average prevalence of unemployment.

Educational variables' frequencies

Table 5: The sample by independent educational variables

Highest qualification	**Full Sample N=2029 (percentage)**	**Unemployed and looking for work sample N=103 (percentage)**
Certificate	8 (0.3%)	1 (12.5%)
Diploma	193 (8.3%)	14 (7.3%)
Degree	681 (29.3%)	39 (5.7%)
Honors degree	812 (35%)	33 (4.1%)
Master's degree	500 (21.5%)	15 (3%)
Doctorate degree	106 (4.6%)	1 (0.9%)
Post-graduate diploma	22 (0.9%)	0 (0%)

Field of study of highest qualification		
Arts	83 (4.1%)	2 (2.4%)
Bus/com/man	684 (33.9%)	41 (6%)
Education	36 (1.8%)	1 (2.8%)
Engineering/technology	584 (29%)	18 (3.1%)
Health sciences	92 (4.6%)	3 (3.3%)
Humanities	248 (12.3%)	22 (8.9%)
Law	64 (3.2%)	3 (4.7%)
Sciences	226 (11.2%)	11 (4.9%)
Other	12 (0.6%)	2 (16.7%)
University Type		
University	1273 (62.7%)	57 (4.5%)
Comprehensive University	520 (25.6%)	23 (4.4%)
University of Technology	236 (11.6%)	23 (9.7%)
Graduation year of highest qualification		
Before 1990	47 (2.4%)	0 (0%)
1991-1995	70 (3.6%)	0 (0%)
1996-2000	103 (5.3%)	0 (0%)
2001-2005	311 (16.1%)	3 (1%)
2006-2011	1398 (72.5%)	87 (6.2%)
Final year average marks		
50s	283 (14.5%)	21 (7.4%)
60s	951 (48.6%)	50 (5.3%)
70s	594 (30.4%)	27 (4.5%)
80s and 90s	129 (6.6%)	4 (3.1%)
Funding (could select more than 1)		
Self-funded	552 (21%)	19 (3.4%)
Family-funded	810 (30.8%)	42 (5.1%)
Bursary	768 (29.2%)	27 (3.5%)
Loan	504 (19.1%)	36 (7.1%)
Received career guidance		
Yes	1272 (62.7%)	64 (5%)
No	757 (37.3%)	39 (5.2%)
How would you rate the usefulness of your qualification relative to other qualifications?		
Less useful	200 (9%)	27 (13.5%)
Equally useful	823 (42.7%)	38 (4.6%)
More useful	968 (50.3%)	38 (3.9%)

How would you rate the skills you obtained from your university?		
Poor and below average	21 (1.1%)	3 (14.3%)
Average	396 (20.6%)	24 (6.1%)
Above average and excellent	1612 (83.7%)	76 (4.7%)

Percentages in column three are relative to the specific variable level. Therefore percentages below 5.1% indicate less prevalence of unemployment than in the overall population. Conversely percentages over 5.1% indicate above average prevalence of unemployment.

4.1.2. Underemployment

The above tables give insight into the participants who are unemployed and looking for work compared with the other four employment statuses namely; self-employed, employed full-time, employed part-time and unemployed and not currently looking for work. As underemployment has been raised as a possible guise of unemployment, respondents also reported their perceived underemployment status as seen in Table 6.

Table 6: The employed sample by underemployment prevalence and type

	Total (valid)	**Answered yes to "Do you consider yourself underemployed?"**	**Response to "How would you describe your underemployment?"**		
			Skill	Time	Both
Self Employed	115 (113)	28 (24.8%)	14 (38.9%)	7 (19.4%)	15 (41.6%)
Employed FT	1668 (1660)	354 (21.2%)	337 (78.6%)	19 (4.4%)	73 (17%)
Employed PT	101 (99)	46 (45.5%)	21 (38.2%)	15 (27.3%)	19 (34.5%)

Of all the people who are employed, 30.5% reported being underemployed. Of the underemployed, the average underemployment by skill reported was 51.9%, by time was 17% and by both was 31%. Therefore, underemployment could to some extent camouflage the unemployment faced by graduates as if included, those who consider themselves underemployed in the unemployed sample, the prevalence of graduate unemployment shoots up to 26.2%. This analysis is however crude but it does raise underemployment as an area for more in-depth study.

4.1.3 Chi squared and un-adjusted odds ratios for significant results

The following three tables report the significant results of chi-squared analysis when comparing the 'unemployed and looking for work' sample with the other four employment statuses by one other variable. The results are presented in three tables. Table 7 shows the socio-economic status variables results, Table 8 the demographic variables results and Table 9 shows the educational variables results.

Table 7: Significant results of the socio-economic variables presented in descending order of the unadjusted odds ratios

		Other 4 employment statuses*	Unemployed and looking for work	Un-adjusted odds ratio	95% C.I	P Value
Newspaper access	No/with difficulty	19 (67.9%)	9 (32.1%)	9.774	4.301; 22.210	0.000
	Yes	1857 (95.4%)	90 (4.6%)			
Computer access	No/with difficulty	10 (58.5%)	7 (41.2%)	8.763	4.799; 16.003	0.000
	Yes	1866 (95.3%)	92 (4.7%)			
Internet access	No/with difficulty	39 (76.5%)	12 (23.5%)	5.204	3.045; 8.891	0.000
	Yes	1837 (95.5%)	87 (4.5%)			
Socio-economic status	Lowest	58 (81.7%)	13 (18.3%)	4.014	2.358; 6.833	0.000
	Other three	1841 (95.4%)	88 (4.6%)			
Family member unemployed and looking for work	Yes	598 (92.4%)	49 (7.6%)	1.975	1.347; 2.896	0.000
	No	1254 (96.2%)	50 (3.8%)			

* The comparison group consists of the other four employment statuses measured in the survey. These are self-employed, employed full time, employed part-time, and unemployed and not looking for work.

α=0.01 for all results

Newspaper, computer and internet access

Of all the variables in the study, newspaper access was the most important indicator of graduate unemployment, followed by race (Table 8), computer access, internet access and socio-economic status. This result underpins the importance of socio-

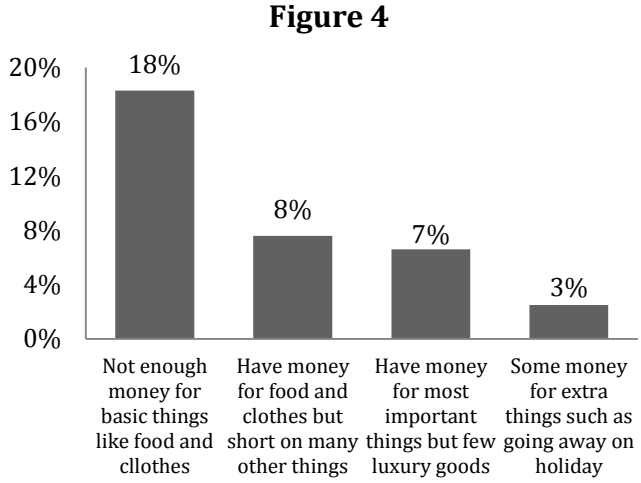
economic status and access to resources with regards to understanding graduate unemployment and is the reason why variables relating to socio-economic status have been reported separately to the other demographic variables.

We see that graduates who can easily access a newspaper, computer and the internet are far more likely to be employed than those who can access these with difficulty or not at all. Given that the survey was conducted online, those who said that they can never access the internet may have made a special effort to say so, possibly to show that they do not consider their access sufficient. Graduates who have difficulty accessing a newspaper are nine times more likely to be unemployed, those with difficulty accessing a computer are eight times more likely to be unemployed and those who have difficulty accessing the internet are five times more likely to be unemployed compared to graduates who reported being able to access these facilities. All of these effect sizes are largely unspecified and therefore further quantitative research would be beneficial. Schoer et al., (2012) report that formal channels of recruitment, in other words responding to job adverts, are available to job seekers with completed high school education or further qualifications and that further degrees and diplomas are associated with significantly higher likelihood of being employed through formal channels compared to social networks, underscoring the importance of these resources. Possible explanations for these finding will be discussed in the qualitative results section.

Socio-economic status

After access to resources and race, socio-economic status was the fourth largest distinguishing factor associated with graduate unemployment. Graduates in the lowest socio-economic status group who reported having 'not enough money for basic things like food and clothes' are four times more likely to be unemployed and looking for work than are graduates in the higher three socio-economic groups. If we look at the bottom two socio-economic groups we see that these graduates are approximately two and a half time more likely to be unemployed and looking for work than are the upper two socio-economic status groups. The effect size is unspecified and further research should aim for more participants in the lowest socio-economic status group.

Figure 4: Unemployed and looking for work sample by socio-economic status



Unemployed family member

Having an unemployed family member almost doubles the likelihood that the graduate themselves will be unemployed compared to the other four employment statuses. In order to gain more insight into this finding it would be valuable to know, in addition to having an unemployed family member, the ratio of employed to unemployed members in the household as this will relate to the households socio-economic status and attachment to the labour force. This is important because possibly the fewer unemployed family members a household has, the more likely they are to have resources that are required to look for a job such money, transport, a computer and the internet. It is likely that having unemployed family members is both a cause and a result of low socio-economic status and this alludes to the structural and self-perpetuating cycle of poverty.

Table 8: Significant results of the demographic variables presented in descending order of the unadjusted odds ratios

		Other 4 employment statuses*	Unemployed and looking for work	Un-adjusted odds ratio	95% C.I	P Value
Race	Black	519 (88.1%)	70 (11.9%)	5.078	3.395; 7.595	0.000
	Coloured, Indian or White	1377 (97.7%)	33 (2.3%)			
Father's education	I don't know	83(87.4%)	12 (12.6%)	2.685	1.521; 4.739	0.001
	Primary, high or tertiary	1722 (95.3%)	85 (4.7%)			
Dependents	No	1137 (93.5%)	79 (6.5%)	2.315	1.456; 3.682	0.000
	Yes	762 (97.2%)	22 (2.8%)			
Age	20 – 30 years	1076 (92.3%)	90 (7.7%)	2.307	1.247; 4.267	0.006
	31-35 years	331(96.5%)	12(3.5%)			
First language	Not English	1171 (93.5%)	81 (6.5%)	2.27	1.429; 3.606	0.000
	English	750 (97.2%)	22 (2.8%)			
Area where spent majority of life	Rural	251 (90.6%)	26 (9.4%)	2.156	1.406; 3.307	0.000
	Urban	1648 (95.6%)	75 (4.4%)			
Gender	Female	1071 (96%)	45 (4%)	1.575	1.078; 2.302	0.018
	Male	855 (93.6%)	58 (6.4%)			

* The comparison group consists of the other four employment statuses measured in the survey. These are self-employed, employed full time, employed part-time, and unemployed and not looking for work.

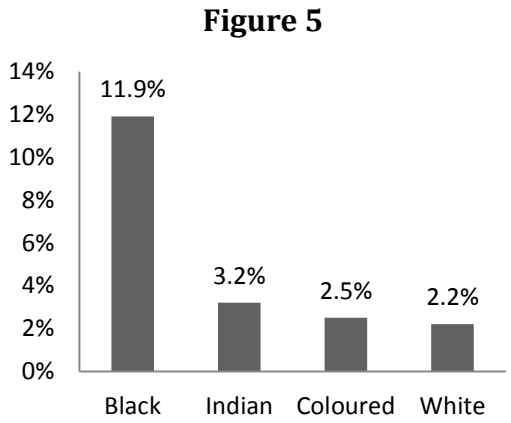
α=0.01 for all results

Race

Race was the most important demographic indicator of unemployment status. The unemployment rate was 11.9% for Black graduates and 2.3% for Coloured, Indian and White graduates combined. Therefore Black graduates are five times more

likely than the other races to be unemployed and looking for work. Again, as with the socio-economic status finding, this result should be viewed with caution due to the unspecified effect size that is likely caused by unbalanced observations among the four race groups. Further research should aim to get a more representative sample.

Figure 5: Unemployed and looking for work sample by race



Parent's education and dependents

Graduates' mothers' education did not differ significantly among the unemployed graduates and the other four employment categories, however, graduates who don't know what their father's highest level of education is are two and a half times more likely to be unemployed than graduates who do know what their father education is. The effect size is fairly unspecified and these graduates may only be 52.1% more likely to be unemployed but could be as much as 4.73 times more likely to be unemployed. Further research into the implications on employment among male and female headed households would be valuable. Altman (2003) reported concern around persistent cycles of poverty for female headed households as she found the return on education for African women to be much lower than that for African men. Interestingly having dependents decreases the likelihood that a graduate will be unemployed by more than two fold.

Age

There were significant differences among all three age groups with unemployment highest among the younger participants. The most significant difference was

between the 20-30 year age group compared to the 31-35 year age group. Graduates younger than 30 years of age were more than twice as likely to be unemployed and looking for work as graduates who are 31-35 years old. This finding supports the notion that the prevalence of unemployment is on the rise. As the effect sixe is unspecified, further research should aim to gather more balanced observations in each age group.

First language

In South Africa the majority of the Black population, including the university population, do not speak English as their first language therefore English as a first language, mirrors the race findings but to a slightly lesser extent. A study looking at graduate employment from a graduate recruiter's perspective raised English ability and functional literacy as key determinants in graduate recruiter's selection of students (Pauw et al., 2006). In this research those graduates who do not speak English as their first language were more than two times as likely to be unemployed and looking for work than first language English speakers. Interestingly self-reported ability to read and speak English was found to be significant, with increased ability being associated with increased employment, whereas ability to write in English was not significantly related to employment status.

Area

9.4% of graduates who have spent the majority of their lives in a rural area reported being unemployed and looking for work compared to only 4.4% of graduates who have spent the majority of their lives in an urban area. Therefore those graduates who are predominantly from a rural area are more than twice as likely as their urban counterparts to be unemployed. According to a Rural Education Access Plan (REAP), defining 'rural' is difficult as there are different gradations of rural (Lewis, 2011). REAP relies on students' proximity to the nearest town, library and internet café and the kind of structure one lives in as measures of 'ruralness' with the understanding that those furthest from these resources and in poor quality housing are considered rural. Therefore, those far from an internet café and with low-socio-economic status are likely to make up some of the rural population, and as we found that people who

have difficulty accessing these resources are more likely to be unemployed, all the factors could relate to the same underlying construct namely 'race'.

Gender

The last significant demographic findings reported relates to gender. In this sample females were 57.5% more likely to be unemployed and looking for work than were males. The effect size is well specified and therefore the finding can be regarded as a fairly accurate reflection of the larger graduate population. More females graduate annually than males but this does not explain why their proportion of unemployment is higher than for males. However, previous unemployment literature found a far greater difference in the unemployment of females over males (e.g. Altman, 2003) and this research indicates that in line with national unemployment statistics, discrepancy in unemployment by gender is narrowing.

Table 9: Significant results of the educational variables presented in descending order of the unadjusted odds ratios

		Other 4 employment statuses*	Unemployed and looking for work	Un-adjusted odds ratio	95% C.I	P Value
Higher education institution	University of technology	213 (90.3%)	23 (9.7%)	2.184	1.402; 3.403	0.001
	University or comprehensive university	1713 (95.5%)	80 (4.5%)			
Field of study	Humanities	226 (91.1%)	22 (8.9%)	1.951	1.241; 3.065	0.004
	Other, not humanities	1700 (95.5%)	81 (4.5%)			
Funding	Loan	468 (92.9%)	36 (7.1%)	1.785	1.196; 2.664	0.004
	Self, family, bursary	2042 (95.9%)	88 (4.1%)			
Highest qualification	Certificate, diploma, degree	750 (93.3%)	54 (6.7%)	1.679	1.153; 2.446	0.006
	Honors, master's, doctorate, post-graduate diploma	1176 (96%)	49 (4%)			

* The comparison group consists of the other four employment statuses measured in the survey. These are self-employed, employed full time, employed part-time, and unemployed and not looking for work.

α=0.01 for all results

Higher education institution and field of study

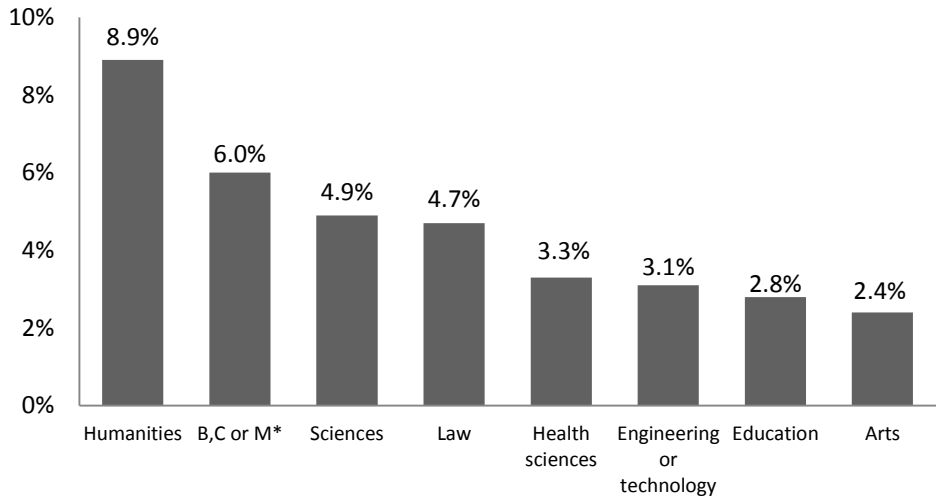
Graduates from a university of technology are more than twice more likely than are graduates from a comprehensive university or a university to be unemployed and looking for work. This is difficult to relate to other findings that report historically Black and historically White status (e.g. Moleke 2005, 2010) as most universities of technology are a result of a merger between a historically Black and a historically White institution (see Appendix 1).

The only time there is a significant difference in employment status between the different fields of study is when humanities is compared with all other fields of study combined. This mirrors Moleke's (2005, 2010) findings in which she reports

that fields of study with little professional focus have the highest prevalence of graduate unemployment. Relating Moleke's report to these results it is possible that some humanities courses have the lowest degree of professional focus (e.g. Communications) as there is highest prevalence of unemployment of graduates in this field of study. Similarly some art courses have high degrees of professional focus (e.g. Jewelry design), therefore this field of study shows the lowest prevalence of unemployed graduates.

Figure 6: Unemployed and looking for work sample by field of study

Figure 6



**B,C or M refers to business, commerce or management.*

Funding

University funding could be considered as either a socio-economic status or educational variable. As this research did not question why the graduate funded their studies as they did, it is difficult to categorise this variable. For example, did they take out a loan because their parents could afford to pay for university or did they take out a loan because that was the norm in their family? Further research should question in more depth why a student used the funding channels that they used in order to understand more clearly whether funding is related to the students financial situation, or possible other variables such as their family norms or Grade 12 results.

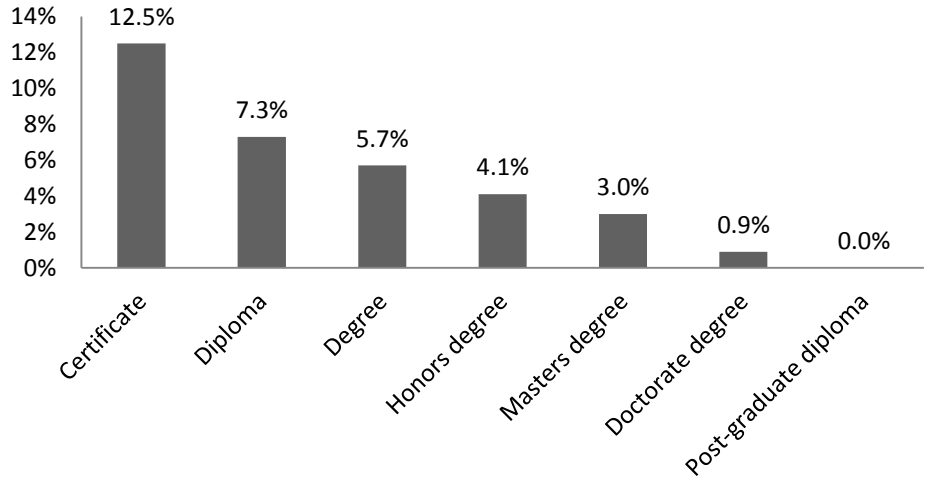
Graduates whose studies were funding by a loan were 78.5% more likely to be unemployed when compared to graduates who studies were funded either by themselves, by a family member or through a bursary they obtained. However, numerous graduates reported having multiple types of funding that commonly differed from one year to the next, and therefore often students who received a loan also used another type of funding too. As mentioned in the literature review, in 2009 the National Student Financial Aid Scheme allocated 93% of their loans were to Blacks, 5% to Coloureds, 2% to Whites and 1% to Indians (National Student Financial Aid Scheme, 7 January 2013), indicating that funding is closely related to race.

Highest qualification

Looking at the difference in unemployment by the highest qualification presented in Figure 7 below, we see that the there is a steady decline in unemployment with increased education level. Interestingly, there is not a statistically significant different between the groups with the exception of a split between degree and an honors degree. Therefore people in this sample who have a certificate, a diploma or a degree are 67.9% more likely to be unemployed and looking for work than graduates with an honors degree, master's degree, doctorate degree or post-graduate diploma.

Figure 7: Unemployed and looking for work sample by highest qualification level

Figure 7



To end the significant results section I look at the interactive effects of the five variables with the highest odds of graduate unemployment; that is newspaper, computer and internet access, race, and socio-economic status. It is important to note that they are related. Those with limited financial resources would spend money on food and clothes before newspapers, computer and internet access given that they are a necessity to survival. In South Africa, the Black population are relatively poorer than the other race groups and therefore it is not surprising that the race findings mirror the socio-economic findings. Looking at StatsSA results for 2011 we see "the significant differences in average annual household income across the different population groups. Black African-headed households were found to have an average annual income of R60 613 in 2011. Coloured-headed households had an average of R112 172 in 2011, while the figure for Indian/Asian-headed households stood at R251 541. White-headed households had the highest average household income at R365 134 per annum" (p.37), therefore Black graduates on average are expected to have a lower socio-economic status.

Reading the multivariate level Nagelkerke pseudo R^2, the binary logistic regression results show that being Black accounts for the most variance in employment status at 10.2%. This is followed by either having difficulty accessing the internet or a newspaper or no internet access each accounting for 3.3% variance, difficulty accessing a computer or no computer access explaining 3.1% variance and lastly being in the lowest socio-economic status group accounts for 2.6% variance in employment status. Finally, taken together these variables account for 12.8% variance in unemployment status. In other words, 87.2% of the difference between the graduates who are unemployed and looking for work compared to the other four employment statuses is not explained by these variables. This signifies the importance of further explorative and qualitative research.

4.1.2 Non-significant results

The following section reports descriptive and non-significant findings.

Job applications

Interestingly, the majority of unemployed graduates only apply for 1-5 jobs per week. Assuming that graduates have CV writing, interviewing and job searching skills acquired through their higher education institutions' career services, there are most likely other reasons preventing them from applying for jobs more often. Possible explanations are the lack of resources required to look for work that were provided by the higher education institution to students but are not available to graduates. This could also relate to a number of other factors, among them the expense of conducting a job search and emotional consequences of unemployment (for example demotivation and feelings of hopelessness).

Work experience

93.2% of the graduates who are unemployed and looking for work reported that they have work experience. Of these 50% said that their work experience is related to their qualification, 19.8% said that it is somewhat related to their highest qualification and 30.2% said that their work experience is not related to their highest qualification. The majority of unemployed graduates reported having more than two years work experience as indicated in the Figure 9. Work experience as a cause of graduate unemployment was therefore not supported in the quantitative findings, however, it was raised as a perceived cause of graduate unemployment in the interviews. Therefore a more nuanced understanding of work experience is required but is not addressed in this research.

Figure 8: Unemployed and looking for work sample by job applications per week

Figure 9: Unemployed and looking for work sample by duration of work experience

Figure 8

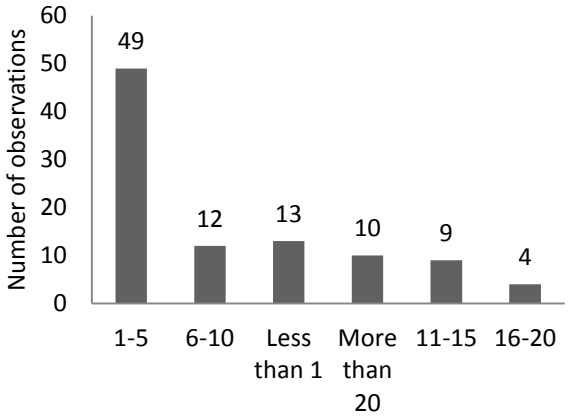


Figure 9



Length of unemployment

Length of unemployment is 0 to 9 months for the majority of unemployed graduates with the rate dropping between 9 and 18 months. Unfortunately these results are not elaborated upon further, however, they give insight into when graduates are most vulnerable to unemployment and can be used to inform higher education institutions' services provided to their graduates.

Figure 10: Unemployed and looking for work sample's duration of unemployment

Figure 10



Career guidance and marks

Surprisingly, whether the graduate had received any form of formal or informal career guidance or not was not significantly related to their employment status. Career guidance was not defined in the survey, as is unknown what types of career services graduates would consider to be career guidance. This could possibly be both a strength and limitation of the question.

Average final year marks obtained was also not significantly related to employment status. Therefore, those with low marks and who have not received any kind of career guidance are no less likely to be unemployed than high academic achievers or graduates who have received career guidance. This raises questions about the importance of career guidance in securing employment and the importance graduate recruiters place on graduates marks in their selection process. Given that career services focus on the provision of career counseling and assessment, it is interesting that the measure of the effectiveness of these services does not appear to relate to the employment of graduates.

To conclude the quantitative finding, in my opinion these were the key questions raised; a) how and why do access to resources, race and socio-economic status account for 12.8% of the variance in graduate unemployment, b) what accounts for the remaining 87.2% of variance not measured in this survey? And relating to the role of higher education institutions c) why is the presence of career guidance unrelated to graduate unemployment?

4.2 Interview results

Given the findings above, interviews were done with survey respondents who reported being unemployed and looking for work, Black, and in the lowest two socio-economic status groups. The interview transcripts that relate to the study's research objectives and to the key questions following from the survey analysis are presented here.

Relating to the research question of the perceived causes of unemployment, participants mostly raised socio-economic status and discriminatory recruitment practices as obstacles to gaining employment. Interestingly, participants were not specifically asked about either of these factors. Additionally they were not informed

about the sampling criteria for the interviews, and therefore did not know that they were chosen on the basis of their reported low socio-economic status. Therefore the role of socio-economic status presented as an important factor in both the quantitative and qualitative findings. In the qualitative results socio-economic status is presented in two themes, namely: the role of finances for the participant as both a student and a graduate, and with respect to the role of resources required to look for work. The interview transcripts assists in explaining why resources were shown to have an important association with graduate unemployment in the survey findings, and expand our understanding of the role of newspaper, computer and internet access in the job search process. The third theme relates to the role of the university and the career services they offer. Possible short-comings of higher education career services are identified and these go a small way is possibly explaining why career guidance was not found to be associated with employment status in the survey results. The fourth and final theme covers discriminatory recruitment practices as a perceived causes of graduate unemployment. This theme expands our understanding of graduate unemployment by again explaining the role of resources required to look for work, as well as the role of graduate recruiters in graduates' job search process.

The extracts were transcribed using symbols developed by Jefferson (2004) in order to display the spoken interview more accurately in written from. The symbols used and their meaning are presented in Figure 11. In the extracts each line is numbered to allow reference to parts of the conversation. The line number is followed by the first three letters of the interviewer or participant's name. The interviewer is always myself, namely Kim.

Figure 11: Jefferson symbols used in the presented extracts

Symbol	Meaning	Example
- :hyphen	Halting, abrupt cut off of sound or word	Whe- it happened afterwards
(( )) :double parenthesis	Non-verbal details	((laughs))
( ) :single parenthesis	Transcription doubt	(not sure what was said)
= :equal sign	Latching of contiguous utterances, with no interval or overlap	Kim: Im just= Par: Ok Kim: =saying that
_____ :underline	Vocalic emphasis	No they didn't
! : exclamation mark	Animated speech tone	Wow!

The first five extracts provide evidence that finance is an important issue for poor students and graduates. Extract 1 indicates how funding can dictate what course a prospective student is eligible to apply for, Extracts 2 and 3 indicate issues for current students relating to finances, Extract 4 raises problems regarding graduating for poor students and Extract 5 raises studying further as an option in order to escape unemployment. Taken together they provide evidence that finances can be an issue entering, during and exiting higher education.

Extracts 6 to 9 highlight the resources required by graduates in order to look for work, specifically the cost of looking for a job and its debilitating effects on poor graduates. Extract 10, together with information found in extracts 6-9, relates to potential short comings of higher education institutions' career services.

Extract 11 raises the presence and pervasive nature of networking and bribery in recruitment. Extracts 12 through to 16 give examples of bribes together Extracts 11-16 relate to the fourth theme: Discriminatory recruitment practices.

4.2.1 Theme 1: Finances as an issue entering, during and exiting higher education

The first extract occurs at the beginning of the interview. Line one starts with the first question of the interview after the purpose of the study and confidentiality have been explained. Sizwe, the respondent, reported in the survey that he is 23 years old and graduated in January 2012 with a national diploma (referred to in the

interview as a BTech) in financial information systems from the Central University of Technology in the Free State.

Extract 1: Influence of finance when entering university

Kim: Um so the first thing that I want to ask you is can you just tell me since you finished high school wha- what have you done?
Siz: Ah I'm just studying, furthering my studies up until now
Kim: Ok so what year did you finish matric?
Siz: Eh two thousand and seven
Kim: And then how did you choose where you were going to study and what you were going to study?
Siz: ((deep breath)) Ok ah how did I choose- ok eh I think, I was, I was thinking of doing BCom Accounting in the University of the Free State but eh because of my ah points, ye entry points, to be admitted to the varsity eh to get a loan cos I was admitted to the University of the Free State but my points were so low that I can't get financial assistance so I choose to come to University of the Free State or Central University of Technology=
Kim: Ok
Siz: =so that I completed my ap- qualification there
Kim: Ok so did you have enough points for a BCom but the loan wouldn't cover you?
Siz: Ja ja the loan wouldn't cover me cos they wanted thirty two points for loan so I had thirty points so I couldn't ((laughs)) ja
Kim: Ok and then, so what did you study instead of a BCom?
Siz: I I studied financial information systems which is more related to a BCom so
Kim: Ok and is that a diploma or is it a BA?
Siz: Ja its BTech
Kim: BTech?
Siz: Ja
Kim: Did you get funding for it?
Siz: Ja I did get funding for it
Kim: Ah who from?
Siz: Ah from NSFAS ((National Student Financial Aid Scheme))
Kim: Oh so NSFAS would let you study the BTech but they would let you study the BCom?

37 Siz: Ja
38 Kim: Ok so you would have liked to have done the BCom but because
39 they couldn't fund you for that you chose a BTech instead?
40 Siz: Ja I chose BTech instead because they need to fund me for
41 BTech

In this extract we see that a student's university choice and their course choice is influenced by their funding requirements, in this case the lack of funding. Siwze indicates that he needed a loan when he says "Ja I chose BTech instead because they need to fund me for BTech" (line 40-41). His example is important because he wanted to study at a university but was forced to study at a university of technology and the survey results showed that graduates from a university of technology are more than twice as likely as graduates from a comprehensive university or a university to be unemployed and looking for work.

When Sizwe talks about his 'points' he is referring to his Application Point Score (APS) which is derived by assigning each subject that he completed in Grade12 a certain allocation of points. Learners get more points the higher their high school marks are and also for subjects passed on higher grade rather than on standard grade. In other words, his performance in high school, particularly Grade12, has dictated the loan amount that he can receive from NSFAS, which in turn has dictated the types of courses and universities to which he can apply. Van der Berg (2008) showed that socio-economic status plays a major role in educational outcomes of primary and high school achievement and that historically White and Indian schools still far out perform Black and Coloured schools in Grade 12 exams and performance tests at various levels. Therefore students from low socio-economic status households and historically Black or Coloured schools are disadvantaged before they even enter into the higher education environment not only because of their inferior education but also by their limiting access to loans. It also shows that policies that govern the allocation of loans could play an important role in perpetuating inequalities between various groups by restricting loan amounts based on application point scores. This extract elaborates on the relationship between socio-economic status, educational outcomes (marks obtained and course studied) and race and provides a possible explanation as to why being Black and in the lowest

socio-economic status group was strongly related to unemployment in the survey findings. Interestingly, in the quantitative analysis, graduates' final year marks were not significantly related to employment status as those with lower marks were no more likely to be unemployed than graduates with higher marks. Therefore is appears that educational achievement (marks) play an important role for learners entering higher education by influencing the courses to which they can apply, but that they do not affect students employment prospects upon graduation.

Peter, the respondent in the following extract, reported in the survey that he is 23 years old and graduated from the Durban University of Technology with a National Diploma in Information Technology in December 2010. His family funded his studies and he has other unemployed people in his family. He reported being unemployed for more than two years at the time of the survey.

Extract 2: Finances at university

Kim: Is there is there anything you think your university would be able to do to help you find a job? I know you've got work now but if you think for that whole period when you weren't employed=
Pet: Ehe
Kim: =is there anything that they would have been able to do to help you?
Pet: Eh one thing that I've realised about our university=
Kim: Mhm
Pet: =it is mostly business minded, the manager they are are very business minded to the extent that eh there are, if you you can pass a date or the due date of the payment they will definitely call you and tell you that "No you have made the deadline you have to pay" and they put the increase and stuff like that but eh eh after I I graduated they didn't give me a letter
Kim: Mm
Pet: A reference telling that "No this particular student eh he he he can be now in a state of being employed"
Kim: Ja
Pet: "So may you please grant him that opportunity"
Kim: Ja
Pet: Yes "I am the lecturer or his professor"

64 Kim: Ja.

65 Pet: Yes

The previous extract showed how finances were restricting to the learner when applying for higher education. This example shows that while at university, as an enrolled student, finances can continue to be an issue. Peter tells us that if a payment is missed, then the university will call you and tell you "you have to pay" (line 14). He also notes that they "put the increase" (line 14). Most noteworthy is that when asked if there is anything that his university can do to help him find a job, the first issue he raises is one relating to finances and the implications for not making the university payments. His response does not particularly relate to finding a job, as was asked in the question, but rather to perceived unfair treatment wherein the university puts pressure on the student to pay their finances, as well as the increase, and in return the student does not receive a reference letter to assist him in finding employment. Interestingly Peter is making the connection between paying fees while at university and being unemployed after graduation. In this way he is giving us insight into how he believes finances and unemployment are connected in a way that supports the recurring nature of poverty. He said in the survey that his family has paid for his studies and as his concern with being unemployed relates to income and not to other aspects of the job, for example meaningful activity, it is possible to infer that he feels a financial burden as a result of his university fees. Therefore we see that money can be an issue for poor students while at university and that this burden continues after graduation and into unemployment.

Lastly, Peter believes that a reference letter from his professor or lecturer would assist his job search. Interestingly this is not a service mentioned anywhere on any of the higher education institutions career services websites. This indicates a possible service that higher education institutions could offer to their unemployed graduates.

The following extract is also taken from Peter's interview and it shows a different way that finances are an issue while at university. This extract occurs later in the interview to the previous one.

Extract 3: Strikes relating to finances

Kim: What do you think makes it more difficult for graduates to find jobs? Are there other things that you haven't already said?
Pet: Eh I think I think eish because I don't- or maybe it is because of ah ah lack of job creation
Kim: Ok
Pet: Of job creation and also ah I'm not quite sure about this one but it's just an assumption
Kim: Ja?
Pet: That maybe ah ah the the the- it also depends on the university or the college that you come from maybe eh some other companies they do a selection according to where the person has been studying
Kim: Ok why do you think this might be stopping you from getting a job?
Pet: Eh first thing first in a our our university, the university that I'm from=
Kim: Ja?
Pet: =every eh eh year maybe in two time a year or a three times a year there was a strike
Kim: Ja
Pet: At the beginning of the year and also eh eh around June there was a strike and then that strike it always appears on the news it always appears on the newspapers and other media eh to show that- and I think when when when the employer's looking at the news and they see this ah school they like strikes and so so forth and then I finish=
Kim: Ja
Pet: =at the end I I I finish my studies=
Kim: Mhm
Pet: =and I want to I want to get a job by applying, first thing first they will see this person comes from Durban University of Technology. Durban University of Technology it is well known by the strikes
Kim: Ja
Pet: They like to strike and the strikes they become so heavy that eh eh students they are getting shot at and ((inaudible)) sorry to say so
Kim: Ja

40 Pet: So the employer won't like that type of a employee to come
41 and work for him or for her
42 Kim: Ja
43 Pet: Eh I think that plays a role. Eh Wits University it is not
44 known for the strikes
45 Kim: Ja
46 Pet: Eh TUT they like to strike but not that much. Eh
47 Stellenbosch I've never heard that Stellenbosch University
48 they are striking or maybe they are striking but eh the
49 strike is very normal or it is very low
50 Kim: Ja. Ok.
60 Pet: Yes ma'am.

In this extract Peter refers to the prevalence of strikes at his university, the role of the media in exposing these strikes and the magnitude of the strikes as factors which influence his university's reputation. All of these aspects add to our understanding of how a higher education institution's reputation is built, and could provide alternative explanations for why graduate recruiters prefer to visit only selected higher education institutions for their marketing and recruitment activities found by Pauw et al. (2008). In Peter's opinion, the first thing an employer will see in his job application is that he comes from Durban University of Technology and "Durban University of Technology it is well known by the strikes" (lines 33-34) and "So the employer won't like that type of a employee to come and work for him or for her" (lines 40-41). In other words he is saying that employers make recruitment decisions based on factors relating to the higher education institution's reputation rather than on individual characteristics of the graduate and that employers have preconceived ideas about graduates based on the higher education institution that they attended. This extends the importance of finances past the students' difficulties in entering the university, paying for their fees and possibly repaying family loans, to a disadvantage in the workforce. This appears to be a well-considered answer as Peter can comment on the presence of strikes at three other universities namely Wits (line 43), TUT (line 46) and Stellenbosch University (line 47). Peter's response here supports the importance of studying graduate unemployment from a community psychology perspective by showing how the reputation of a university is established, how the university is portrayed by the media, and how this message is used by graduate

recruiters in turn influencing the graduates' job search and resulting employment prospects.

If I look at the news headlines from 2009 to 2012, I see that during these strikes the students demanded, amongst other things, better financial assistance for first year and fourth year students and for their book allowance to be increased. This provides further evidence that poor students are faced with financial problems whilst at university and these problems may result in either poor academic performance (due to lack of test books for example) or even dropout (due to unpaid fees). As a result of poor students communicating their poverty related issues to the university and public through strikes, they become at greater risk of poverty (through unemployment) because of the negative perception employers have of their university. Furthermore, whether Peter himself has participated in these strikes or not is inconsequential as the reputation resulting from these strikes relates to the entire institution and all of its graduates and not only to the students who participate in the strikes. Therefore the resulting disadvantage in the work place is outside of individual student's control. Reputation resulting from these strikes could also possibly explain why graduate employers only visit certain higher education institutions for their graduate recruitment fairs. Therefore, in addition to the perceived poor quality of education at historically Black institutions and lack of infrastructure required for graduate recruitment fairs at certain universities, factors relating to students' poverty also negatively affect graduate recruiters' perception of the higher education institution and their decisions around where to focus their company's advertising and graduate recruitment activities.

In the following extract Sizwe, from Extract 1, explains how his lack of finances delayed his graduation date, which in turn negatively influenced his employability.

Extract 4: Finances delay graduation

```
1   Kim: Ok um have you had any experiences when you've been looking
2        for a job umm that you can remember that have been good
3        experiences or bad experiences, um in looking for a job?
```

4 Siz: Eish ah the problem is I didn't have my certificate up until
5 October because I was owing so they only paid my fees around
6 October and then that's when I started to have my
7 qualification so I can apply, so since from January til now
8 ((November)) I've been applying with my statement of results
9 and they don't consider me so, it was hard for me to find a
10 job during this year because of I didn't have my
11 qualifications you see?
12 Kim: Ok
13 Siz: So since October- so I've started applying and at least eh
14 I'm getting ah positive responses
15 Kim: Ok
15 Siz: Ja

Sizwe received his qualification certificate a period after he had completed his qualification because his student fees were unpaid. This is a standard practice amongst higher education institutions whereby a qualification is only granted if the student's fees have been settled in full. Therefore, students' with access to money can graduate before classmates who do not have sufficient funds to settle their university account. Siwze spent ten months applying for work using his statement of results rather than his certificate. He believes that this is why he has not been considered for any positions to which he has applied. Now that he has his certificate he says "at least eh I'm getting ah positive responses" (lines 13-14). In other words, in Sizwe's opinion the problem of not having his graduation certificate is caused by a lack of finances and results in lowered employment prospects. Given that the growing unemployment rate in South Africa can be largely attributed to those who have never previously held a job and who enter unemployment when they enter the labour force (Kingdon & Knight, 2000a) and that graduates from historically Black institutions are more susceptible to this because they are absorbed into the labour market more slowly than those from historically White institutions (Moleke, 2003), it becomes clear that these factors can have compounding negative results for the already disadvantaged poor Black population.

This extract also indicates how higher education policies influence graduate unemployment. If the higher education institution offered alternative forms of evidence that the student has graduated, besides their final certificate, Sizwe may

have been able to secure employment soon after finishing his course. In addition to the higher education institution offering reference letters to unemployed graduates, they could also provide reference letters indicating that the student has completed all of their courses and are in a position to be employed, even though they have not officially graduated. Similarly, graduate recruiters could be more lenient in their application process regarding the documents they require of the applicant in these situations. Recruiters could make provisions for certain students to apply for work at their company with other evidence of their qualification besides the graduation certificate.

The last extract on the theme of finances as an issue entering, during and exiting higher education is from Lebo's interview. Lebo studied a one-year foundation programme at the University of KwaZulu-Natal and continued into an undergraduate diploma in biochemistry. Thereafter she taught in a school for two years and then went on to study honors in microbiology from which she graduated in 2010. On completion of her honours course she did a one-year internship and at the time of the interview she had been unemployed for 11 months. In this extract she tells us that she is enrolling from a master's degree to escape the frustration of unemployment, and that furthering her education is secondary to the importance of the R3000 per month that she will receive from her education bursary.

Extract 5: Studying further to escape unemployment

Leb: Honestly umm between me and you I'm just doing my master's because I was getting really frustrated sitting at home and not being able to do anything so at least master's they said there's a bursary and at least I can get three thousand rand a month so I thought "So ok it's fine at least I'll be getting my master's and getting that particular amount where I can be able to buy myself things, underwears or food whatever" so that was the main reason but I believe now that maybe doing my master's is going to help me in some way or get me in somewhere- as I said it's in DUT and they're connected with companies so I believe maybe something good is going to come out of this.

Kim: Ja

Leb: Ja

15 Kim: Ok so is- ja- ok- so you're going to do the MTech hey?
16 Leb: Ja
17 Kim: Ok and is your- is your MTech paid for by DUT or is it paid
18 for by NSFAS or by someone else?
19 Leb: It's paid by DUT.
((some conversation missing on how bursary works))
20 Kim: Ok so you're not going to have any financial difficulties
21 while you do your master's?
22 Leb: As long as they give me the bursary so I can have money to
23 travel, you know- no. I'm still waiting for the response
24 from the bursary because it's all about the bursary if they
25 don't give me the bursary then I'll have to drop out because
26 I still don't have money to go there
27 Kim: Ja
28 Leb: Ja

In this extract Lebo explains how she is "just doing [her] master's because [she] was getting really frustrated sitting at home and not being able to do anything" (lines 1-3). In other words, the primary reason for her enrolling in a master's degree is not because of the career prospects it will provide her but to escape the frustration of being unemployed. She is also not confident that her master's degree will increase her employment prospects evident when she says "maybe something good is going to come of this" (lines 11-12). On the other hand Lebo says that "it's in DUT and they're connected with companies so I believe maybe something good is going to come out of this" (lines 10-12). This shows that she expects her university to assist her in some way through its connections with companies. Therefore she acknowledges the importance of connections in gaining employment and indicates that in addition to studying personal networks through family and friends, graduate employment should study the scope and quality of the higher education institution's connections as well. This provides evidence for more in-depth research into the role of connections in relation to graduate unemployment, and to expand the study of connections to include those of the higher education institutions as well as the graduates personal connections. Further on she tells us that she will have to drop out if she doesn't receive the bursary, indicating the magnitude of the importance of the bursary and showing that having her honors degree has not resulted in any

financial security. She reiterates this when she says “it’s all about the bursary” (line 24).

This extract is important because it reveals the persistence of poverty as a debilitating factor in poor people’s lives. Lebo has an honors degree but is unemployed and therefore still reliant on bursaries. Furthermore, she does not want to highlight her situation as she says “between me and you” (line 1). Later in the interview Lebo talks about the humiliation and pressure of being the only person from her area to have an honors degree but that she is still unemployed. As a result she feels the burden of poverty as well as the humiliation of being unemployed. This extract shows how poverty can continue to be debilitating years after graduation and not only ten months after graduation as mentioned by Sizwe and loosely mirrored in the survey findings.

Therefore, from the first five extracts we see evidence that socio-economic status (a) affects learners entry into university, for example through the Application Point Score they achieved in Grade 12 and through their reliance on a loan, (b) affects student’s behavior and experiences while at university, for example the necessity to strike or delayed graduated due to unpaid fees, and (c) is persistent in nature and continues to affect graduates experiences years after graduation. Importantly, these unique obstacles that poor students and graduates face potentially lead to increased likelihood of unemployment, further perpetuating the financial difficulties they experience. This underpins the importance of understanding graduate unemployment from a holistic perspective, appreciating the role of the individual, the role of their higher education institution and the role of graduate recruiters.

4.2.2 Theme 2: Resources required by graduates in order to look for work

The following four extracts continue looking at the role of finances for unemployed graduates but specifically look at resources required to look for work, in which finances play a large role.

Lindy, in Extract 6, completed high school in 2004. In 2005 her mother paid for her to redo Grade 12 at a private institution in order to increase her marks as she wanted to study radiography but due to her Grade 12 marks she did not qualify.

Unfortunately she did not improve her marks during this year and as a result registered for a diploma in translation and interpretation instead of radiography, as the entry requirements are lower. She completed the three-year diploma in 2008 and went on to do a postgraduate diploma (namely BTech) in translation and interpretation, all at Durban University of Technology. She completed her BTech, a two-year course, in 2010 and graduated in 2011. Since then she has been unemployed and looking for work.

Extract 6: Cost of a job search and university resources

Kim: Ok. Umm that's all of the questions I have but maybe if you just take a little time to think about- is there anything else that you would want to tell me, that you think would help me understand umm why some graduates are unemployed? Anything about your life or your experience that I might have not asked you, that I might be missing- to understand why some graduates are unemployed?
Lin: I think as for my experience as I come from a poor family
Kim: Ja?
Lin: I sometimes can not get the right resources where I see like a post in the newspaper, it will take me some time to apply for a job so or else email my CV so I have to go like to take a taxi in order for myself to get an access to the internet where I will pay like ten rand per hour to send my CV
Kim: Ja
Lin: So even where- when I go to post office I have to take a taxi from home to go to post office and buy envelopes and all this stuff to send my CV so I think that also have a huge impact
Kim: Ja. Do you think you would apply for more jobs if you had better resources?
Lin: Yes I think so
Kim: Ok
Lin: Because it's sometimes happen I see a post I don't have money to go to an internet or go to post office I end up not applying for that job. Yes
Kim: How much do you think it costs you for one job application?
Lin: Ah I think forty rands
Kim: Ok what is that-

Lin: Cos I have to take a taxi from home to Durban which costs me fourteen rands
Kim: Mhm
Lin: Which means the return is twenty eight rands
Kim: Mhm
Lin: So and then I have to buy envelopes I have to do copies that's that's it
Kim: Ok and how much does the envelope and the copies and the post normally cost?
Lin: Ah ok the fast mail it's normally cost fifteen rands, the ordinary mail it's cost nine rands so its depends on the closing date of the post
Kim: Ok and then you-
Lin: Cos if like today it's Wednesday if the closing date is on Friday you have to to use fast mail
Kim: Ja. So if you had to apply now it would be even more than forty rand, it would be your transport twenty eight rand then to print to use the computer and to print might be- how much?
Lin: It will be three or five rands depends depending on which internet café you use
Kim: Ok so then that's say that's five rand then you'll also pay fifteen rand for the postage
Lin: Yes so while- it was easy the time I was at university because I was printing for free the only thing that I was paying for it was envelopes
Kim: Ja
Lin: Cos copy I was doing copy for free at the library and printing for free so since now since I'm not working and studying I have to pay for all these things
Kim: Ja so do you think if your university had a service that people who have graduated from there can still go and use their facilities that would help you?
Lin: Yes yes

Lindy positions herself as someone who comes from "a poor family" (line 8) without me saying anything about money previously in the interview or in our communication prior to the interview. She therefore corroborates the survey findings that socio-economic status is significantly related to employment, as she sees being poor as definitive aspect of her unemployment. She goes on to say that "I

think that also have a huge impact" (line 19 and 20) indicating her perceived magnitude of the impact of money on her employment prospects. She articulates the costs involved in applying for a job which include buying a newspaper, transport, buying envelopes, doing photocopies, mailing her application and the cost of the internet café. In her estimation a single job application costs R40. Given that the average household income differs significantly by race, with Black households having the lowest income of R69 632 per annum or R5 802 per month (StatsSA, 2012) this is an exorbitant amount. As she stated in the survey that she lived in a rural area most of her life and StatsSA reports the average income in rural areas to be lower, it is possible that her household income is even lower than the South African average.

Without being specifically asked about the role of her university she says "it was easy the time I was at university because I was printing for free the only thing that I was paying for it was envelopes. Cos copy I was doing copy for free at the library and printing for free so since now since I'm not working and studying I have to pay for all these things" (lines 54- 60). Therefore, graduates do not have access to university resources that students have access to. This helps us to understand why graduates in the lowest socio-economic status group, and with difficulty accessing resources, have a higher prevalence of unemployment compared to the other employment groups as their job search is hindered by financial and resource constraints. Furthermore, as the cost of a job application is so high Lindy says that "I sometimes cannot get the right resources" (line 10) and "Because it's sometimes happen I see a post I don't have money to go to an internet or go to post office I end up not applying for that job."(lines 25-27) which is a further lost opportunity cost. This could explain why in the quantitative findings the majority of unemployed graduates reported applying for an average of only 1-5 jobs per week.

This raises important questions around the role of the university in supporting their graduates in finding employment, particularly poor graduates who do not have the household resources required to apply for work such as a computer, internet connection and fax machine. In addition to reference letters and graduation certificate equivalents, shown in the previous theme to be assets in the job search process, higher education institutions could provide their unemployed

graduates with access to newspapers, computers, the internet, photocopying and postage services. These indicate very practical ways in which higher education institutions could assist unemployed graduates look for work by alleviating some of the disadvantage that poor graduates face in the job market. Interestingly, Lindy reports using these services in the library. This points to potential overlap in career resource centers' and library services. Possibly better articulation of career resource centers' services is required to avoid duplication of services, or perhaps better divergence of library and career resource center services.

This extract also raises concerns around the high cost of applying for a job and the resource intense application process outlined by graduate recruiters. Graduate recruiters too could provide other alternatives to applying for work which are less resource intensive and therefore less discriminatory to poor graduates. For example, recruiters could consider application process that require only a cell phone or they provide certain graduates with printed application documents and include a pre-paid postage envelope.

Lastly, this extract indicates that along with access to newspapers, computer and the internet, survey research should include questions around access to transport, and distance to a post office. These are measures of 'rurlaness' that could be understood better with regards to their impact of one's ability to look for work.

The following three extracts are similar to the one above. They show that a job search requires numerous resources, most of which are not easily accessible to poor graduates. They differ from the one above in the cost of a job search and the conditional effects that money can have on conducting a job search.

Extract 7: Cost of a job search and family support

Kim: Ok. Um. How many jobs do you think you applied for between- after you graduated and when you got your internship?
Pet: Yo yo yo yo as many as I could. I was spending almost every day on the internet, spending everyday looking at the newspaper buying the newspaper all the ((inaudible)) that is advertising the post or the the internships and other things I can't- even now a person can call me for for the interviews ne I wouldn't even remember, wouldn't really remember, "did I really apply for for for this job or what?"

((Some irrelevant conversation missing))

Kim: Ja. Ok when you use the internet to look, where did you use the internet?

Pet: Ah you are talking about eh venue?

Kim: Yes

Pet: Aah I started at school ja using the internet at school then the time I was out there ah ah from school back at home I was I was going to to town=

Kim: Ja

Pet: =to the eh internet café

Kim: Ja

Pet: And search in the internet for for for the job and stuff

Kim: Ok so- and how much would you pay to get to the internet café and how much did you pay for the internet?

Pet: Eh to to get to that ah destination ma I was paying, return=

Kim: Ja

Pet: =a return would be eighty rands and then just to use that internet

Kim: Are you saying one eight or eight zero?

Pet: Eight zero

Kim: So forty rand there=

Pet: Eight zero

Kim: =forty rand back?

Pet: Yes. Ja forty rands going and forty rands coming back

Kim: Shew

Pet: That’s how far it was

Kim: And then how much did it cost to use the internet?

Pet: Ah by estimation it was plus minus fifty rands

Kim: Ok so how many hours does that allow you?

Pet: Aah close to two or three ja

Kim: Ok ok

Pet: Ja

Kim: So I mean that’s very very expensive to get-

Pet: Very expensive ma’am that’s why I’m saying that that period it was very very very much frustrating

Kim: Ja

Pet: I was losing money for nothing. Applying applying not getting a job nothing eish eish eish

Kim: Who was paying for you to do this?

Pet: Eh I was I was having the support from my mother and also

50 from my dad
51 Kim: Ok
52 Pet: Sometimes from my brother when he has something you know
53 Kim: Ja
54 Pet: Yes

This extract explains why access to the internet is an important determinant of graduate unemployment, as found in the survey results. It also indicates the importance of transport as a resource and the high cost unemployed graduates can spend on transport alone. Peter says “Eh to to get to that ah destination ma I was paying, return- a return would be eighty rands and then just to use that internet” (lines 24-26), therefore, urban unemployment may be higher due to transport costs. In addition to this he says “Ah by estimation it was plus minus fifty rands” (line 36) to use the internet. While Lindy complained about the cost of her job search we see that it can be far more for other applicants who live further from an internet café. Peter doesn’t seem to consider his job search effective or useful when he says he was “losing money for nothing” (line 46).

As with Lindy, Peter also used the internet at university while he was a student there, but now he has to travel to town to use the internet (lines 14-18). Therefore the universities supply much needed resources to current students but not to their graduates, implying that their role ends once the student leaves the university. It also suggests that higher education institutions that hold graduate fairs are assisting their students find employment by eliminating transport costs as the employers come to the university rather than the students going to the employer, but these transport costs become a debilitating factor in the graduates job search once they have graduated from their higher education institution. Graduate employers should be aware that their online application processes bear heavy costs, especially for those living far from an internet café, and in this regard online recruitment processes are often unaffordable to poor graduates, thereby driving a cycle of poverty whereby poor graduate are unable to apply for these jobs and as a result less likely to secure employment.

Lastly, his family funds his job search and if we assume that his parents are employed, as is his brother, this is evidence of the supportive financial role

employed family members play and "reiterates the importance of household attachment to the labour market" (Schoer et al., 2012) for graduates. Unfortunately the role of family was not well covered in the survey and future quantitative research should ask more specific questions around the type and magnitude of support offered by family members to job seekers.

During Grade 12 Nomsa, in the following extract, was given a bursary to study a three-year marketing diploma. Since graduating she has done various contractual jobs, all unrelated to marketing, and has not held a permanent position. She mentioned having received good marks for her diploma and being a hard worker both whilst studying and currently while looking for a job.

Extract 8: Resources dictate job search

Kim: Like ja think of the last year, what is your most typical day?
Nom: With me, ok ok I I wake up every day and I've got a little sister she's eight years old and I accompany her to school, when I was not working in this firm, and I accompany her to school and then I come back when I do have the money in that week I'll buy a newspaper come back at home and clean after cleaning I'll browse through the newspaper and read it and try to find a job circling everywhere. I will call maybe the following day I'll start calling those numbers and then sometimes I borrow a laptop from my aunt's daughters but sometimes she doesn't give me. When I borrow the laptop then I'll use it the whole day because it's not mine obviously and other days I'll go to the internet café, it's costly it's ten rand per hour so I don't have money always but when I do have a fifty rand I'll go to the internet café maybe for three hours and then the other twenty rand will be for food while I'm there. That's a typical day for me
Kim: Ok

What stands out in this extract is the conditional nature of Nomsa's job search. She says "*when* I do have the money in that week I'll buy a newspaper" (lines 6-7), "*when* I borrow the laptop then I'll use it the whole day because it's not mine" (lines 12-13) and "*when* I do have a fifty rand I'll go to the internet café" (line 16). Nomsa can only apply for jobs *when* she has money or *when* she can borrow the laptop.

Therefore, Peter's job search is costly but not necessarily restricted because he has financial support from his family. On the other hand, Lindy and Nomsa's job search is expensive and in addition to this it is restricted to when they have the required resources. This shows that financial constraints have a differing impact on low socio-economic status graduates' job search and that its impact is more severe for some than for others.

Additionally, family resources influence family responsibility and in Nomsa's example her responsibilities extend to helping her little sister and cleaning the house. This provides evidence of the multifaceted nature of the relationship between family resources and job seekers ability to look for work. Unfortunately current unemployment research, including this research survey, does not explore this relationship sufficiently. Therefore, any intervention aimed at either measuring the relationship between family resources and employability or at assisting poor graduates in their job search should acknowledge the relationship between family responsibilities and family resources.

The following extract is taken from Sibusiso's interview. He finished Grade 12 in 2001 and did a certificate in business administration in 2002. Thereafter he studied a BCom majoring in insurance and risk management and marketing at the University of the Witwatersrand. Since graduating in 2010, he has held three part-time jobs. Besides being unemployed in between these positions, he has been unemployed and looking for work for the past three months. Prior to the extract he has spoken about how he normally applies for jobs, using newspapers and the internet, and that he finds the job application process very expensive.

Extract 9: The cost of faxing

Sib: Most companies if you send your CV they want you to fax stuff and faxing is hell of expensive and you need internet café, money, it's a whole lot of factors because you don't have your own like internet at home or anything like that so it becomes quite problematic when you're not bringing in anything yet you need money to you know- apply and do a whole lot of things

Kim: Ja and so how did you get money to or ah- how did you look for a job, where did you use the internet and how did you

get money to post your CV and things like that?
Sib: Ja a friend of mine borrowed me his modem and I managed to scrambled ah some data money that I used to apply everyday but ah any response that came back asking me to fax stuff I just ignored cos ah I faxed once and it cost me like sixty five rand to fax everything they wanted, and up to this day they didn't- they still haven't responded
Kim: Ok so once they said in their application "Can you fax something" then you just left it?
Sib: Ja
Kim: So can you say that part of the problem with looking for a job is the expense and the process of applying?
Sib: Ja definitely. If I apply to a company via email I expect them to respond via email and ask for my documents via email rather than having to ask me to fax stuff
Kim: Ja

I have chosen this extract to highlight a particular conundrum which poor graduates face. That is, throughout the interviews these graduates reported that they look for jobs in the newspaper because it is easy to get a newspaper and unlike the internet they don't pay for the amount of time they have access to it. Therefore they can read it carefully, circling the jobs to which they will apply, and tailor their application to the job advertised. In addition to looking for jobs in the newspaper, others reported using the internet on their phone to apply as it eliminates the cost of travelling to an internet café. In reviewing the jobs advertised in newspapers, I see that probably the majority of the positions advertised are public sector/government jobs. Having applied for a number of government jobs myself I am aware of what the application process can be. Commonly the application process entails printing out the forms they provide on their website, completing these forms, scanning them, and faxing them together with one's academic record, CV and copy of your identity document.

The conundrum is that the jobs adverts which are cheap to access, namely those in the newspaper, can be the most expensive to apply for. Unemployed graduates, who do not have access to computers and the internet, can either experience an expensive process is accessing job adverts by paying the costs associated with traveling to an internet café and paying for the internet, paying for

data on their phones or traveling to companies and applying door-to-door, or they can experience this expense later when they apply to jobs accessed fairly cheaply in the newspaper but that require printing, scanning and faxing of numerous forms.

This extract therefore raises unique problems poor graduates face in their job search namely the compatibility of various advertising and application options and their viability for poor graduates. As seen with the example of strikes resulting in a bad reputation for the whole university, here we see another factor, which is outside of graduates' control but that affects them adversely. These point to the necessity for higher education career services to extend their scope of practice beyond counseling and guidance services to address issues outside of the student or graduates control and more within the graduate employer's control. Higher education career services, together with graduate employers, could review various job application processes, with the intention to understand how the application process is biased towards certain applicants. In the extracts we have seen that those who do not have money, who do not have the internet at home, who pay for photocopies and faxing themselves are most disadvantaged. These are most likely to be graduates from families with unemployed household members and from families who live in rural areas. So while the graduate recruitment fairs held at some higher education institutions are very helpful in eliminating transport costs by bringing the employers to the students, these fairs are not open to graduates, and unless a student secures employment before they graduate, they will have to personally bear these costs. As graduate recruiters do not host their graduate recruitment fairs at all higher education institutions, their application process is biased at the stage of marketing themselves to graduates as well as at the online application stage discussed previously. Taken together, a poor graduate, who studied at a higher education institution where graduate recruitment fairs were not held, face dual disadvantages in the job search and application process.

4.2.3 Theme 3: Potential short-comings of higher education institutions' career services

The extracts above have primarily focused on the cost of looking for work and how higher education institutions' career services and graduate employers are often not

sensitive to the debilitating cost of looking for work for poor graduates. The extracts have also reflected on the positive effect of graduate recruitment fairs – how these fairs bring the graduate employers to the students, thereby eliminating the transport cost associated with the student visiting the potential employers.

The following extract shows a different way that higher education career services can fall short in providing services to students and graduates, and provides further evidence for rethinking the role of higher education institutions in assisting their graduates secure employment. The extract is taken from earlier on in Sibusiso's interview.

Extract 10: Graduate recruitment fairs fall short

Kim: Um if you think about your university, Wits University, how-
did they help you in any way to prepare- to look for a job?
Sib: Not necessarily they just brought companies over and they offer grad programs and once you're in none of those programs, you're basically on your own, they don't prepare you for that part
Kim: Ok so would you say that the services they offered you, that graduate recruitment fair, did it- did it assist you in any way?
Sib: No it just assisted me in getting some rejection letters and ja that's all basically and some of those programs don't actually respond
Kim: Ok so you found programs at the graduate recruitment fair and you applied and then they never got back to you?
Sib: Yes
Kim: Ok

When asked about the assistance he received from his university in preparing for or looking for a job, Sibusiso only refers to the graduate recruitment fair. I know that in 2010, when Sibusiso was at Wits University, that other optional career services where available and as he makes no reference to other services offered by Wits such as CV writing and interview skills training, it is possible he doesn't know of these services. Therefore, marketing of these services may be ineffective. This leads me to the optional nature of these services and that they are offered on students' request by making an appointment with the career counseling and development

unit, as opposed to being part of the course curriculum. This implies that higher education institutions perceive their career services to not be required by all students but only those who seek help. Additionally the onus is on the student to seek help from the career services, implying that (1) the student is more responsible for their career prospects than their higher education institution, and (2) that all students have equal time available to access these support services. However, this may not be the case, for example, for students who travel far distances to and from their higher education institution or for those with additional family responsibilities like Nomsa (Extract 8).

Sibusiso's disappointment in the career services his university offered is fairly explicit here when he says "you're basically on your own, they don't prepare you for that part" (line 5-6) and "[they] just assisted me in getting some rejection letters" (line 10). This points to poor integration of the services, possibly as a result of in their optional and non-structured nature. So while graduate recruitment fairs have advantages for poor graduates in that they eliminate the cost of travelling to companies and may provide opportunities for networking and establishing connections to the labour market, they do not ensure employment and they do not ensure authenticity of the positions the employers are offering. This is evident when Sibusiso says "some of those programs don't actually respond" (line 11-12). This remark may provide an explanation for why the receipt of career guidance was found not to be significantly related to employment status in the survey results.

In summary, the above five extracts give us insight into the high cost of a job search for those who lack the required resources, the resources provided by higher education institutions that are available to students but not to graduates, the varying resources offered (or not offered) by family members to the graduates for their job search, and shortcoming of higher education career services namely that given their optional nature they are unknown to students and that career fairs can be ineffective. By helping us understand how and why money is important at various levels and times in students' and graduates' lives and by highlighting gaps in the career services offered by higher education institutions, these extracts give some explanation of the survey results, specifically why access to resources and socio-

economic status are important determinants of graduate unemployment and conversely why career guidance was found to be insignificantly associated with graduate unemployment.

To conclude the second and third themes I summarise the following key questions: Can graduate employers' applications processes be changed to make the process less resource intensive and biased against poor graduates? How can the effectiveness of higher education institutions' career services, such as career guidance and graduate recruitment fairs, be measured? Are these career services equally accessible to all students? And could there be benefit in providing compulsory career services to students rather than the current optional nature?

4.2.4 Theme 4: Discriminatory recruitment practices

In the last group of extracts, the high cost of looking for work becomes very clear and a new aspect of the cost of looking for work is revealed. Extract 11 introduces a new factor to the study, namely the presence of bribery. It also elaborates on the role of family and friends and the use of connections in recruitment. The extract occurred within the concluding minutes of Peter's interview. This, together with the following five extracts cover the last theme to be explored in this report. The theme discusses common recruitment practices, and as most of these practices are unfair for certain groups of graduates they are labelled as discriminatory.

Extract 11: Bribery and networking in recruitment

Kim: Ok. Umm I don't have any more questions for you. Um is there anything else that you could tell me that would maybe help me with my study to understand why so many young people are unemployed?
Pet: Ah ma'am we can talk the whole day ne
Kim: ((laughs))Ja
((Irrelevant conversation missing))
Pet: The municipalities are doing wrong they are not doing anything for those people they- eh people in the municipalities if you can count or if you can also do that research about the municipalities of South Africa (I'm not saying) all of it- in South Africa if you can count the

people that are unqualified and sitting at the offices, they are more than people who are qualified.

Kim: Ja but how do you think they get this job if they're unqualified?

Pet: Hai man! ah sorry sorry ma'am. It is all about eh I think the connections you- we we all know about this connections. We can't run away from it and we can't hide it

Kim: What do you mean it's about connections?

Pet: Eh like let's say I know you

Kim: Mhm

Pet: You are working at the municipality, maybe you are a manager

Kim: Mhm

Pet: I I I don't have qualification and there is a a a vacant post

Kim: Ja

Pet: Ja at the municipality I'm just going to talk to you and say "Ai can you eh eh make a plan that I I can be here at this office and working?"

Kim: Ja

Pet: Wouldn't even think twice just because you know me or maybe even some bribes. Bribes are there. It is it is there it is happening=

Kim: Ja

Pet: =in our daily lives so this is also part of the things that discourages us, even there was this- there is this person that I know, he is not qualified to be maybe an IT officer

Kim: Ja

Pet: Then I applied. He applied.

Kim: Ok

Pet: What did they do? They put him on that office. Nothing, they just reject me, they don't even call me or tell me that no I'm unlucky I'm not selected

Kim: But how did he get it? What did he do?

Pet: Ai that's the thing that I'm asking myself now. And I'm still going to be asking myself each and every day "How come? How come?" You see?

Kim: Ja and you think maybe he bribed someone or maybe he's got connections

Pet: Yes. Yes because of those connections that I was telling you about. They do happen.

52 Kim: Ja
53 Pet: They are there
54 Kim: Ok
55 Pet: It it- so me, if I had a connection too by then I'd be
56 talking another story telling you "No I have a job, I have a
57 nice job" Eh eh but now I'm struggling to have a nice job
58 because I don't have connections. It's just me and my
59 qualifications

Peter talks about the use of connections as a widely known and used recruitment strategy. He says "It is all about eh I think the connections you- we we all know about this connections. We can't run away from it and we can't hide it" (lines 16-18). This concurs with literature that identifies networking as the most effective job searching strategy (Bernstein, 2010; Rankin et al., 2007; Schoer et al., 2012; Wittenberg, 2002). He reiterates this when talking about bribes when he says "Bribes are there. It is it is there it is happening in our daily lives" (lines 32-35). In addition to the pervasiveness of bribery and using connections to find a job, he also talks about the normality of these behaviors in saying "Wouldn't even think twice" (lines 31). In closing he says "if I had a connection too by then I'd be talking another story telling you "No I have a job, I have a nice job" Eh eh but now I'm struggling to have a nice job because I don't have connections. It's just me and my qualifications" (lines 55-59). This shows that he is certain that if he had connections he would be employed, but even though he seems certain that he would have a job if he had connections, he refers to the illusive nature of how this would actually happen when he says "I'm still going to be asking myself each and every day "How come? How come?" You see?" (lines 44-47).

What is interesting about his description of connections is he says "I don't have the qualification" (line 24) indicating that he may be referring to something more ominous than using connections to secure employment as he implies that the person is not qualified for the job. Further on he says "because you know me" (line 31) but he does not describe the nature of this relationship. With caution I infer that Peter may be referring to nepotism and I do so without treating nepotism as being either good or bad. While it may be worthwhile to consider moral and legal considerations regarding nepotism, "the general industrial-organisational

psychologists view is that any policy relating to recruitment, hiring, or promotion of individuals should be based on the qualifications to perform the job (Gutman, 2012, p.12).

This transcript explains another way how socio-economic status is related to unemployment status and illuminates networking/nepotism as a common recruitment strategy. Therefore poverty recurs for people with unemployed family members firstly because they don't have the resources required to look for work and secondly because they have fewer connections to the labour market. In hindsight, my survey should have gone to greater lengths to understand how employed/unemployed family members and friends influence graduates' job search process and employment prospects to facilitate deeper understanding of these findings.

Lastly, as Peter says "they don't even call me or tell me that no I'm unlucky I'm not selected" (lines 42-43) he is telling us that because he does not receive feedback from graduate recruiters he is unsure how the recruitment process works and why his application is unsuccessful. Therefore graduate recruiters are adding to the illusive nature of recruitment through their lack of feedback to applicants. Both higher education career services and graduate recruiters could play a role in ensuring timeous and accurate feedback is given to applicants. This would provide clarity on the recruitment process and allow applicants to improve their application, and future job prospects, by the honest and constructive feedback they could receive. It would also provide a 'return on investment' for the money graduates spend on job applications.

In the following extract Lindy has been saying that if she could return to university she would study radiography as intended, and not interpretation and translation as she has done. She believes that getting a job in radiography would be easier because she sees lots of adverts, particularly in the newspaper and on notice boards, for jobs in radiography. These jobs that she sees are mostly in government departments.

Extract 12: Poor families can't afford to pay bribes

1 Kim: Ok and besides the course is there anything else that you

2 think makes it more difficult for you to find a job?
3 Lin: Yes another thing is that when you like apply=
4 Kim: Mhm
5 Lin: =people tend to look at your CV and like it's depends on who
6 you know. You have to know people to get a job in other
7 places
8 Kim: Ok
9 Lin: If you just nobody and you know nobody you can't get a job
10 Kim: Ok
11 Lin: Some places you do have to bribe in order to get a job so
12 for us it is difficult for us who come from a poor families
13 to get that money to bribe people to get a job
14 Kim: Ja have you-
15 Lin: Government ((inaudible)) so you have to know people=
16 Kim: Ok I hear-
17 Lin: =in order to get a job
18 Kim: Can you tell me about your experiences that you've had with
19 umm having to know people or having to bribe people?
20 Lin: Yes since you said my my information is confidential
21 Kim: Yes
22 Lin: I will tell you. Ok I once get a call from I'm not sure
23 whether the department of- it was one of the government
24 departments
25 Kim: Ok
26 Lin: Where they do- where I got a call- a person was calling me
27 he said "If you can give me five thousand rand you can get
28 this job"
29 Kim: Yo!
30 Lin: But then I didn't have that money since I'm not working. I
31 told him that "What if you give me a job then I work then I
32 pay you I pay you once I got paid?" he said he want the five
33 thousand now or else I'm not going to get this job then
34 that's why- that's how I lost my that job
35 Kim: Ja. Had you applied for that job?
36 Lin: Yes I did
((Some repetitive conversation missing))
37 Lin: So
38 Kim: Shew it's terrible
39 Lin: I didn't have the money that's ho- why I lost the job. I

40 think I was qualified for the job so because I didn't have
41 the money for bribe that's why I didn't get the job

In the previous extract Peter referred to the pervasiveness and normality of bribery and using connections in recruitment. Here, Lindy talks about the same behaviours and she doesn't seem to condemn the behavior, possibly indicating that it is a common recruitment practice. Her perceived normality of this behavior is evident both when she says "Some places you do have to bribe in order to get a job" (line 11) and when she offers information around how she tried to negotiate the bribe.

Lindy says that another difficulty in her job search is that "it's depends on who you know. You have to know people to get a job in other places" (lines 5-7). As with Peter's example above, it is unclear whether she is referring to 'who you know' as a networking strategy or possibly some form of nepotism, however, before Lindy gives details of how she was bribed she says "since you said my my information is confidential I will tell you." (lines 20-22) implying that there is some sort of secrecy around this kind of practice. Nevertheless, the extent to which the bribe and having connections are interrelated needs to be established and understood in greater detail. This is an area for further research.

Moleke (2003, 2005) reported that Black people are employed primarily in the public sector, whereas Whites are mostly employed in the private sector. As Lindy explicitly says that the behaviors to which she is referring occurs in government (line 15), it suggests that further research is required to understand the connection between preferred advertising avenue (for example newspaper versus internet), the application process (for example emailing versus faxing documents) and recruitment practices (for example the importance of connections and bribery). There may be systematic ways in which poor graduates are disadvantaged from the advertising avenue, through application and into recruitment practices.

In closing her story she says "I didn't have the money that's ho- why I lost the job." (line 39) indicating that in her mind there is no doubt that she would have got the job had she been able to afford the bribe. She shows that in her experience employment is not based on education but rather one's ability to bribe a recruiter and based on connections (lines 5-6). Both ability to pay a bribe and connections to the labour market are not within the individual graduate's control and they provide

reason for studying graduate unemployment from a holistic perspective, far beyond simply understanding characteristics of the individual. It is clear from this extract that graduate recruiters play a significant role as gatekeepers in the recruitment process.

The following extract occurs shortly after the one above in which Lindy talks about being asked for a bribe and her inability to pay the bribe because she comes from a poor family.

Extract 13: Bribe for in-service learning

Kim: Do you have other experiences like this or do your friends have they had experiences like this?
Lin: Yes they did
Kim: And can you tell me about them?
Lin: Yes. One of my friends=
Kim: Mhm
Lin: =who in like two thousand and eight she was looking for an in-service training, then she got to the Department of Justice, she went there and the manager told her that he has post who is looking for people who are qualified for translation and interpretation, so he is willing to give her this position but then she must bribe in order for her to get the the position
Kim: Ja and did he say how much?
Lin: No she didn't because at school we were told about ((inaudible)) she was still doing an in-service training, he said she is going to pay him for the position, she is no longer going to do the in-service training
Kim: Ja
Lin: So the lady decide not to take it and report it at school
Kim: Ja. Why do you think she didn't report this to school?
Lin: Ai I don't know
Kim: So did she do her in-service training there al- had she started her in-service training or was she still going to start?
Lin: She was about to start and they get her another one at school
Kim: Ok so she decided she is not going to bribe them she'll rather take the other one?
Lin: Yes

This extract is interesting in that, while in Extract 12 Lindy is referring to a bribe proposition that took place at a time when she had already graduated (and therefore was not directly connected to the higher education institution), this extract refers to a bribe being offered to a current student of the higher education institution for her in-service learning, which is a subject within the diploma course. Therefore, this raises interesting questions around the role of the higher education institution in ensuring fair recruitment of their students into in-service learning, whereas prior to this we have only considered recruitment of graduates. Questions arising from this extract are; who is responsible for ensuring fair recruitment of students and/or graduates; are there processes are in place for students or graduates to report unfair recruitment practices; what are the roles of the higher education institution, the recruiter and the student in this scenario, and what power do these respective roles possess; and, what are the effects of unfair student and graduate recruitment practices? All of these questions provide areas where further research would add to our understanding of graduate unemployment in South Africa.

Below, Nomsa talks about her experience of applying for a government nursing learnership, following conversation on bribery in recruitment. In this interview, as well as in the previous interviews, bribery and the use of connections was brought up by the graduate being interviewed and not by me, the interviewer.

Extract 14: Bribe or application fee?

Nom: Also in the government department in Orlando I know that, I've experienced it there was this learner- nursing learnership that was being advertised when-
Kim: In the newspaper?
Nom: In the newspaper, it was a government learnership. I went there, I went to town first I went there, tried to apply there but they said "We've got, in Soweto we've got our Department so you need to go back to Soweto". I went to Orlando when we got there they gave us like a small ticket that has their stamp and a number and then also a date when you should come because they said we we're too many. When that date came I went to Orlando again and then they told us about the fifty rands that we need to pay in

order for us to write the test. They said "Yes you've got a C symbol in English and it's higher grade" and then they checked my certificate and then they told me they want fifty rands for us to write the test so because I didn't have that money and because I told myself that I also won't pay for a job, if it's not meant for me it's not meant for me but I won't give a person money just to find a job. So we went home we went back because I didn't have money

Kim: And would you consider reporting that or not?

Nom: No because if you're going to go back with the police there they're going to ask you "Who told you that?" then they're going to make a fool of you. They going to go round and round and round and round and then you won't find any help

While in the previous extracts the bribe proposition appears to be illegal, in this extract Nomsa is being asked for money to write an application test and it is unclear whether she is in fact being bribed or not. It is possible that some graduates are sensitive to the presence of bribery in recruitment and that anytime they are asked for money they assume it is a bribe. Alternatively, it is possible that bribery takes on quite sophisticated guises and that they are in fact very pervasive in graduate recruitment. Either way, this extract shows again that poor graduates are often unable to pay fees relating to recruitment and are therefore impeded in their job search. When asked whether she would consider reporting the bribe, Nomsa says "they're going to ask you "Who told you that?" then they're going to make a fool of you" (lines 24-25). This alludes to her vulnerable position in that she can easily be made a fool of. Again, it is unclear what higher education institutions' role in ensuring fair graduate recruitment practice is and who should be responsible for assisting graduates in difficult situations as the one described here. This is further evidence that graduate recruitment practices should be monitored and governed in a way that empowers students and graduates, rather than leaving them vulnerable. In order for this to be done, the roles and role-players need to be clearly articulated and the power dynamic assessed. To my knowledge this has not been studied.

The following extract, from Thembi's interview, gives an example of a different way that bribery can occur. Thembi graduated with a national diploma in electrical engineering in April 2012. She was unemployed for six months and

recently received a learnership position. Since being asked about the difficulties she faces when looking for work she has hinted at the presence of bribery in recruitment but been reluctant to talk about it. Here I ask her explicitly about bribery.

Extract 15: Negotiating the bribe

Kim: Can you tell me of an example, it doesn't have to have happened to you it can have happened to a friend but how it- how a bribe would have worked?
The: Ah what I've heard is that ah- you come into- they usually ah- you talk to someone in the company who's in HR then they shortlist you for that position, they even give you the questions, and then they they give this ah- you have to pay a certain installment every month once you're in that position, two thousand or five thousand depending on how much you're going to be earning, how much the HR people are going to be negotiating for you in that process
Kim: So they give you the interview questions so that you can do well in the interview?
The: Ja so you can do well in the interview because most companies most decisions lie with the managers, and the more- ah- HR- so they try to push you as their person so that ah- even the manager disagrees on the- you you lack something he wants in a person, maybe you lack drive ah you can answer the questions but he doesn't see potential for you beyond your answers that you've given in the interview so ah he he he's kind of pushed you into a corner because you've scored high on the questions that he has set up for you
Kim: Ja
The: Ja
Kim: And the- you say- so every single month if you get the job you have to pay a percentage of your salary to this person?
The: Ja that's how most bribes work or some just put a lump sum to ensure that you get the the- get into the interview, then you pass the interview, then afterwards you pay another lump sum
Kim: Ok. So you give them one set of money to get the interview questions and then another set of money if you get the job?
The: Ja

35 Kim: So even if you are not successful in the interview you still
36 have paid some money?
37 The: Ja or do- you still have gone through the process of paying
38 them money

In her interview Thembi, like Lindy, appeared reluctant to share information around bribery. However, she had fairly detailed information of how bribery can occur giving evidence that it is something she is familiar with and therefore possibly quite common, at least among the participants I interviewed. Thembi shares an example of how bribery can occur that raises questions around who drives the bribery in the company. She says that usually HR negotiates the bribe with the applicant although they are not the ones who make the final employment decision. Therefore in her experience, being employed is not only a result of ability to pay a bribe as we heard previously in Lindy's interview but a combination of ability to pay a bribe, success in the interview process and based on the job requirements. It is remarkable that the price of the bribe in this example is given as R2000 or R5000. This large sum required would immediately be unattainable for very poor graduates and therefore the possibility of securing the job, let alone the interview questions, would be near impossible for them. Secondly, this example shows how even using bribery in the job application process can be unsuccessful. This is shown when Thembi confirms that even if you don't get the job you have "still have gone through the process of paying them money" (lines 37-38). Together these extracts provide strong evidence for expanding our understanding of graduate unemployment by studying exactly how networks develop and operate, especially given that networks are the most common way for graduates to secure employment (Schoer, et al. 2012).

Lastly, I now move away from looking at bribery in recruitment to the use of connections. These last extract, along with Extract 11, refer to networking or possibly nepotism. All together, these extracts provide strong evidence for the presence of nepotism and bribery in graduate recruitment, which to my knowledge this has not been studied at all, let alone with reference to the role of higher education. They also elaborate on our understanding of the relationship between resources (both financial resources and networks) and the job search process, found in the survey to be an important determinant of graduates employment status.

Extract 16: Securing a job through family before graduation

Kim: Ok. Umm you said that either you need to bribe someone to get a job or you need to know someone?
Lin: Know somebody yes. If you don't know anybody in government sector it's quite difficult to get a job unless there are so many people who are wanted for that position that's how you gonna get a job
Kim: Ok
Lin: If there's only one position that requires one person to work, even if you are qualified for that position you won't be- you you won't get the job because we like- I used to apply for position at this government department that I'm qualified for, as interpreters
Kim: Ok
Lin: So the post was saying it wanted grade twelve or diploma in translation and interpretation. I've got a BTech but then I wouldn't even have a call from them calling me saying "I should come for an interview"
Kim: Ok so what type of-
Lin: It's like that even they didn't get my CV when I apply so I don't know what exactly is like going on because we like going to apply maybe five of us with the same qualification but nobody's gonna get a call from them, (I've seen) people calling for an interview
Kim: What type of person do you think will get the job then?
Lin: I think the person they know, they used to take from their families or their friends or so
Kim: Ja have you had an experience like this where somebody who's a family member or a friend has you know has got a job?
Lin: Yes
Kim: Ok tell me about it
Lin: There is this guy who who who we- were at the same school we were also studying. He was like "I know that at the end of this I'm going to get the job. I'm just doing this just to get a qualification so that people won't say that I'm not qualified at the end of the day". He knows everything that's- where he is going to work and everything then after we graduated he went and started working till now he is also, he is working

39 Kim: So he knew before he started studying already that someone
40 would give him a job there?
41 Lin: Yes
42 Kim: And was this a family person or was this a friend?
43 Lin: A family person
44 Kim: Ok. Shew

In Extract 11 Peter spoke about the certainty of getting a job if he had connections. This extract builds on our understanding of connections as Lindy says "I think the person they know, they used to take from their families or their friends" (lines 25-26). In these examples, it is very difficult to distinguish networking from nepotism but given that there is some secrecy in reporting this behavior, this implies that there may be something suspicious occurring. Alternatively it is possible that she is describing a form of networking, commonly used in recruitment because of its cost effectiveness, and that the student referred to above had other legitimate reasons for being given a job upon graduation. Therefore the use of networks was very beneficial for this student and had positive outcomes.

Either way, these extracts highlight the vague distinction between networking as an effective job search strategy and nepotism as an illegal activity and also highlights the importance of attachment to the labour force, whether it be though family or friends in securing a job. This indicates the importance of first entry into the labour market as an important stepping stone, as once in employment a person can begin to build a network that is attached to the labour market. This attachment to the labour market through family and friends is another aspect of family resources spoken about in the first group of extracts. It underscores the importance of studying family resources in a holistic and multifaceted way, beyond socio-economic status. Together the qualitative findings reiterate the necessity to understand graduate unemployment in context of South Africa's apartheid past, higher education institution's services and graduate recruitment practices. Furthermore, the findings point to numerous areas where further study is required to explain the survey results more fully.

Chapter 5: Discussion and conclusion

5.1 Discussion

My discussion highlights three key findings in this research, and explores these findings in terms of their implications for research methodology, theory and policy relating to graduate unemployment. Briefly the key findings are (1) the unique vulnerabilities that poor graduates face and the recurrent nature of poverty, (2) the assumptions of higher education institutions' career services, and (3) the presence of discriminatory recruitment practices and how these negatively affect poor graduates in particular. Throughout the discussion I raise areas for further research.

5.1.1 Implications for research methodology

I first reflect on research methodology in the field of gradate unemployment and then on this research specifically. As reported by Koen (2006), most evident when reviewing the literature is the lack of definitions of the concepts used in the study of graduate unemployment. As discussed in the literature review, often researchers do not define the term graduate and readers are left to interpret this through the sample used. In my opinion, researchers' definition of the term should at least refer to where the qualification was obtained (e.g. at a public or private higher education institution) and whether the qualification referred to is one of the person's qualifications or the highest qualification (i.e. does humanities graduate refer to all people who have studied humanities or only those whose highest qualification is in humanities).

Regarding the understanding of and definition of employment status, currently there is insufficient depth of understanding of different unemployment types and the impact of these types on peoples livelihoods. Problems in defining unemployment relate to previous concerns around the StatsSA's definitions of unemployment (Kingdom & Knight, 2000a), underemployment as a guise of unemployment (Bernstein, 2010) and the problematic use of mutually exclusive categories (Cosser & Sehlola, 2009). A more nuanced definition of unemployment, which allows for multiple categories, an overlap of categories and possibly relative severity of these categories would be beneficial.

My research went a small way in addressing this by categorising the unemployed as those who are unemployed and looking for work and those who are unemployed and not looking for work, however these are not sufficient. For example, this research's survey should have included an item whereby participants who indicated that they were unemployed and not looking for work indicated why they were not looking for work. This would have helped categorise employment status more usefully. Additionally this survey should have allowed participants to select more than one category of employment. Not only would a more nuanced and consistently used definition of unemployment be beneficial, but so too would a scale of the severity of unemployment. For example, it is clear that the impact of unemployment is more severe for some graduates, and for their families, than for others. Understanding different levels of severity would, among other things, aid higher education institutions' career services and other services provided by various stakeholders, in prioritising assistance to groups within the unemployed population.

Beyond difficulties in defining the terms graduate and unemployment, there are other important concepts that should be explicitly defined among researchers. To note a few these include the concepts of poverty, resources, career services and nepotism.

To a large extent current graduate unemployment research replicates previous methodologies and often result in confirmation of findings with little emergence of new findings and areas for study (Koen, 2006). I concur with Koen in his identification of the following trends in graduate unemployment studies; conceptual overlap, reliance on surveys, the study of similar variables and lack of theoretical frameworks.

Reflecting on this research, methodologically I aimed for *complementarity;* that is to measure overlapping but also different facets of the same phenomena (Green et al., 1989) and *significant enhancement;* facilitating thickness and richness of data *(*Collins, et al., 2006). I believe that as the research was executed as planned, and that the research questions justified a mixed methods design that both of these design aims were met. Complementarity was achieved through the more elaborate and deep understanding gained specifically relating to the role of race, socio-

economic status and resources in relation to graduate unemployment. Enhancement was achieved through the discussions on the cost of looking for a job, the role of connections and bribery in recruitment, and the role of higher education institutions' in the employment of their gradutes. Additionally the results allowed for inferences to be made on the quantitative and qualitative components separately as well as inferences based equally on these two sets of findings.

A critique of the method is that the quantitative findings confirmed to a large extent what other quantitative research had already found, with a few exceptions. The most notable exception, in my opinion, is that race, socio-economic status and access to resources only explained 12.8% of the variance in employment status. Most research in the field is largely descriptive and doesn't report multivariate analysis, which can inflate the importance of individual demographic and educational variables. Therefore including multivariate analysis was valuable. Also notable, is the statistically non-significant role of career guidance in employment status. This raised questions regarding higher education institutions' role is increasing the employability of their graduates as their current services are based on career guidance and skills training.

My concern with the survey questionnaire was that often the questions stopped short of the valuable information, allowing for only superficial analysis and inhibiting deep understanding of the phenomena. For example, the role of employed and unemployed family members didn't extend to questions around networking and attachment to the labour market, making it difficult to link the survey results with the interview findings and inhibiting integration of the results. Similarly, in the survey the role of resources did not extend beyond the presence or absence of certain resources into, for example, the cost of resources and their importance in conducting a job search, thereby adding little to current literature. In this sense the survey possibly covered too many variables at a superficial level and would have been better off looking at fewer variables in more depth. With this said, it was important to confirm results found in previous literature given the recent changes in the South Africa after apartheid and specifically in the higher education landscape.

In addition to the results obtained, the survey was used as a sampling strategy for the interviews. The interview results led to criterion sampling based on the respondents' race and socio-economic status with Black graduates from the lowest socio-economic status group being selected. To a small extent this was a valuable sampling strategy as the interviews revealed insight particularly pertinent to poorer graduates. However, had I just have chosen Black graduates for the interviews, who were extensively shown in the literature to be vulnerable to unemployment, it is likely that given apartheid there would have been low socio-economic participants in the sample. For this reason I do not think future research should utilise the combining of methods for sampling purposes in the same manner utilised in the current study.

Reaching low socio-economic status participants through email and SMS is another critique of the method as these individual's often do not have money to access the internet or sufficient cell phone credit to reply to SMSes. For this reason care should be taken when researching poor graduates given their more limited communication via these means. It is possible that a number of poor graduates do not access their email accounts at all resulting in them not partaking in email based survey like this one. Therefore other ways should be considered in order to contact poorer participants.

It is unclear whether my two categories of unemployment added meaningful value to the literature. Possibly the prevalence found in this study was slightly lower than found in other studies because of this definition. However, it is more likely to be due to my sample being over-representative of populations known to have better employment prospects namely Whites, males, and post-graduates.

In summary I was satisfied with the quantitative component of the research. I was specifically happy with the large sample size that was representative of graduates across different public higher education institutions in South Africa and with the inferential statistics reported as these are often absent in graduate unemployment research.

Reflecting on the interview process, telephonic recorded interviews worked well and I would utilise this approach again. The broad interview questions allowed

for open discussion and for new insights to be revealed. Unfortunately I do not think the full potential of qualitative research was achieved in this research possibly because of the small sampling frame resulting in few participants and the relatively short interviewing time with each participant. I would suggest that further qualitative research explore the research aims in more depth with each participant. However, the ten interviews conducted did allow for inferences to be made based on a balance of the survey and interview results. For example, the findings around the importance of access to resources was found in the survey, it was explained in the interviews and therefor resulted in finding based on a balance of quantitative and qualitative data.

To conclude the implications for research methodology, I highlight areas requiring further study. New areas of study include; the role of poverty in relation to (i) the cost of looking for work, (ii) the resources required to look for work, and (iii) how recruitment practices disadvantage poorer graduates; how higher education institutions' reputations are built and maintained in the public and how this relates to the employment of their graduates; and the assumptions of, provision of and effectiveness of career services. Furthermore graduate unemployment studies should elaborate on their theoretic or conceptual framework and their design. For example, where causality is being investigated, the necessary design criteria should be met.

5.1.2 Implications for theory

In line with the areas for further study outlined above, I suggest that graduate unemployment studies shift their focus from the individual to understanding the unemployed graduate in their context. In the literature review I raised community psychology as a framework to facilitate this shift. As the research findings have supported this need I now revisit principles of community psychology in more detail to support this suggestion.

Community psychology is concerned with transforming the way in which social problems are conceptualized and understood by taking cognizance of social issues and environmental stressors (Seedat, et al., 2001). Relating to graduate unemployment, social issues would include such things as the presence of

discriminatory recruitment practices, and of the negative reputation of certain higher education institutions. Environmental stressors would include poverty and the resulting lack of resources, the perceived ineffectiveness of graduate recruitment fairs and the absence of networks for some graduates. Furthermore, community psychology is aware of and appreciative of the interaction between individuals and their environments.

In terms of the causes and solutions to problems, practitioners in the community psychology attempt to develop theory and practice relevant to the majority of the South African population who were oppressed during apartheid (Pretorius-Heuchert & Ahmed, 2001). This is relevant as "unemployment is both a cause and a result of the poverty situation in which people find themselves" (Swanepoel and de Beer, 2009, p6). It as a cause, since without a job a person has no income and cannot afford to pay for the resources required to look for work. It is a result because inability to look for work prevents a person from finding employment. Unemployment is in many instances also the result of isolation and vulnerability (Swanepoel and de Beer, 2009). For example, because of the distance from town centres experienced by those living in rural areas, and the lack of connections to the job market resulting from having unemployed family members, the result is that poor graduates are in many different ways isolated from the job market. They find it difficult to gain access to employment opportunities due to their insufficient access to newspapers, computers and the internet. At another level poor graduates are also vulnerable to unemployment as the poor have nothing to bargain with when approached with bribes. As the recurrent cycle of poverty is evident in both the literature and this research, and given South Africa's history, I argue that community psychology principles should be applied to the study of graduate unemployment in a framework that appreciates individual demographic and educational factors in context of both higher education and graduate employment factors.

As I have proposed that graduate unemployment literature take a community psychology approach it is necessary to review the critiques of this approach. Prilleltensky and Nelson (1997, cited in Viljoen & Eskell-Blokland, 2007) identify five values that should guide the implementation of interventions in communities. These

are: health; caring and compassion; self-determination and participation; human diversity; social justice; and holism[9]. These authors argue that the values that support change within existing systems are often foregrounded, while the values that support transformation of existing systems and especially power relationships often do not receive enough attention. An example applied to the study of graduate unemployment is that graduate employers possess significant power in the recruitment process and therefore if change is to be achieved in the overall unemployed graduate population, research and intervention at the graduate employer's level would be required. Other related levels and systems include; how perceptions of higher education institutions are built and maintained through channels such as the media and graduate recruitment fairs and, how these relate to subsequent graduate recruitment practices.

A second critique of mainstream community psychology is that the emphasis on social aspects of psychological functioning lead to the neglect of emotional aspects of human psychology (Gibson & Swartz, 2004 cited in Viljoen & Eskell-Blokland, 2007). In other words, the underlying emotion of individuals and groups are not addressed in the process of change. This study looked at physical or concrete needs of an unemployed graduate, such as the resources they require to look for work, but the study did not look at unemployed graduates more abstracts needs such as the motivation and resilience they require to look for work in the face of lack of feedback from employers and perceived rejection. This reiterates the importance of studying the psychological resources, psychological stressors and psychological effects of unemployment on individual and groups of graduates. It is also necessary to understand career service practitioners and graduate recruiters as individuals, as well as communities, in order to understand what informs and sustains their behavior. Without attention to all levels of analysis and intervention, sustained change is unlikely to occur.

Furthermore, in proposing a shift from studying graduate unemployment from an individual perspective to one at a broader community level, it is necessary

[9] These values are discussed in Visser, M. (2001) Community Psychology. In M. Visser (Ed) *Contextualing Community Psychology in South Africa* (pp.2-14*)*. Pretoria, South Africa. Van Schaik.

to define what is meant by the term 'community' in this context. For example, who are members of the community, to what extent are the members similar or different, and what are the assumptions underlying this definition of community. In this research the term 'community' has included (1) the graduate, (2) their higher education institution and (3) graduate employers. To a small extent the research looked at the graduate's family composition. Further conceptual development of a community based graduate unemployment model is required to build on this preliminary model (presented below as Figure 12).

In addition to a theoretical shift from the individual to studying the larger socio-political context, I also propose a through exploration of the assumptions of current career services. As mentioned in the literature review, career guidance is defined as the services intended to assist individuals make occupational and educational *choices* and manage their careers (Watts & Fretwell, 2004). These authors go on to say that career guidance can promote social change such as increased equality, inclusion in and access to educational and labour market opportunities.

However, in my research, career guidance was not significantly related to employment status and furthermore the interview participants explicitly state how socio-economic factors exclude them from opportunities and prevent them from gaining employment. For example Sizwe's higher education institution choice and course choice were inhibited by his reliance on a loan (Extract 1); Nomsa can only apply for work when she has money or when she can borrow a laptop (Extract 8), and Lindy lost a job because she couldn't afford the bribe (Extract 12). From these examples it is clear that their choices are inhibited by financial constraints and therefore no current form of career service could assist with the difficulties identified in the examples.

Current career services are based on the assumption of choice and fail to address issues outside of the graduates control, for example the reputation of the higher education institution, discrimination in recruitment practices such as employers only visiting historically White institutions for graduate recruitment fairs and lack of resources required to look for work. I have not studied the training they

provide to students but Pauw et al. (2006) reported that graduates are unable to deal with interviews in a mature manner and I found that they seem unable to deal with difficult recruitment situation. This is shown, for example, in Extract 14 when Nomsa shows her vulnerability to being made a fool of if she tries to report the perceived bribe.

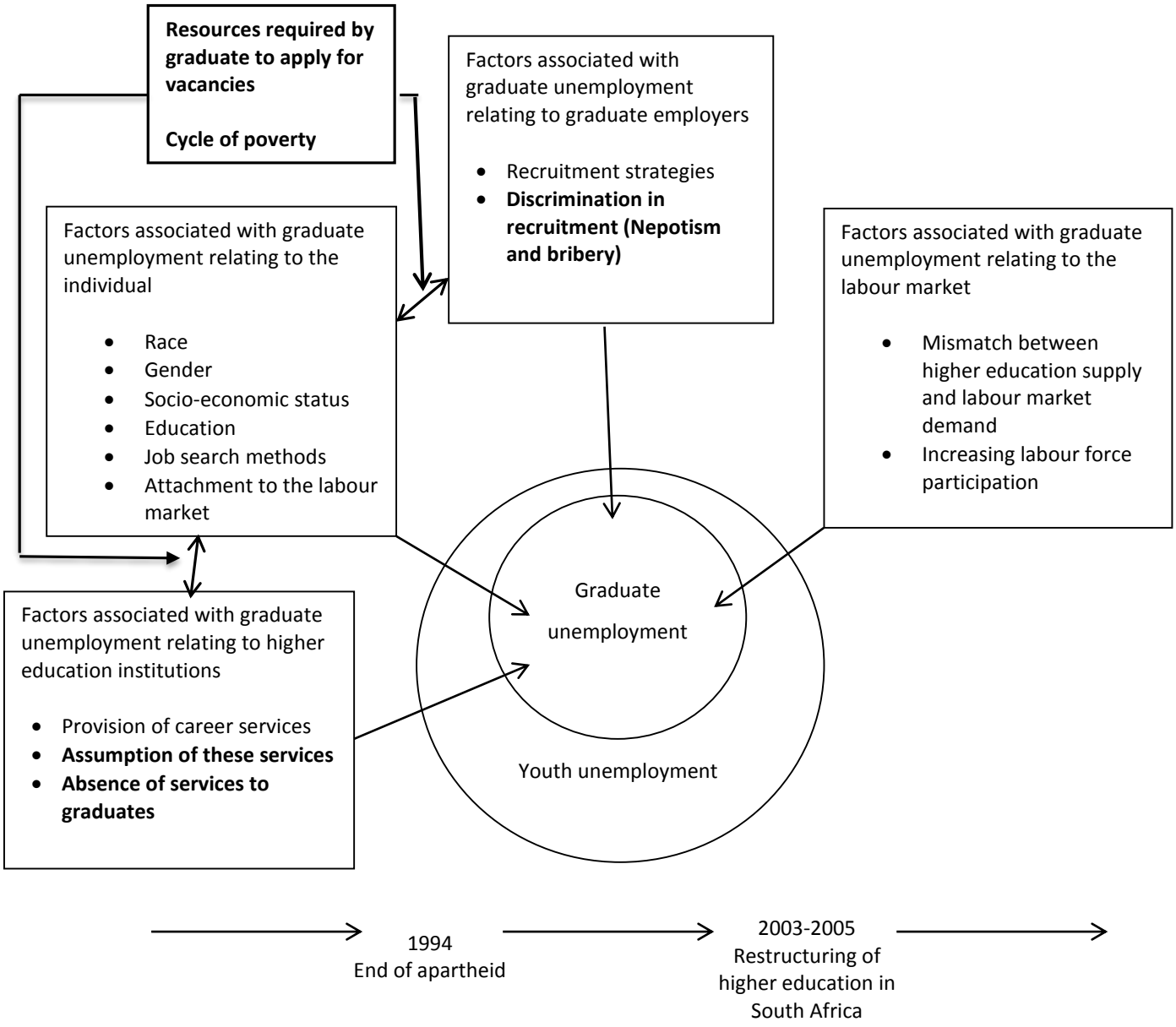
Beyond their assumption of individual choice, other potential problems with higher education institutions' career services became evident. Most importantly, the services do not extend to graduates and therefore I infer that higher education institutions do not perceive themselves to be responsible for their graduates once they have left the institution. In clarifying who is responsible for unemployed graduates, the South African Qualifications Authority report that "the National Youth Development Agency (NYDA), with the Department of Higher Education and Training (DHET) via Sector Education and Training Authorities (SETAs), together with business and employers are responsible for career development services to youth not in education, training or employment" (SAQA, 2013, p.12). The numerous stakeholders responsible for graduate unemployment may create a situation where responsibility is diluted among role-players. Nevertheless, resources which students have access to through their university such as computers, the internet, employer information and contact with employers are not available to them once they graduate. The subsequent expense of these resources significantly inhibits their ability to look for work.

Beyond access to resources (or the lack thereof), this study found evidence of discrimination in recruitment practices that adversely affect poor graduates. Existence of these practices was established but unanswered questions include: how is nepotism defined; how are illegal recruitment agreements negotiated, and; who are the drivers of these illegal practices?

To conclude this section, my two suggestions for graduate unemployment research going forward are (1) to consider principles of community psychology in order to develop framework for understanding unemployed graduates within the context of higher education and graduate recruitment, and (2) to question the assumptions of current career services, particularly with relation to the assumption

of choice and the subsequent assumption that all graduates have equal access to the labour market once they leave the higher education institution. In light of these two suggestions, I present a revised conceptual framework that includes new variables (presented in bold) relating to the role of higher education, the role of graduate employers and to structures in the environment that influence the relationship between factors of the individual and factors relating to graduate employers and higher education institutions' career services.

Figure 12: Revised graduate unemployment conceptual framework



5.1.3 Implications for policy

Policies associated with graduate unemployment should appreciate and address both individual and structural aspects of graduate unemployment. Similarly interventions to alleviate unemployment should be implemented and effective at these different levels. In my opinion, policies should specifically address challenges that low socio-economic status groups face when entering into, during and graduating from higher education as well as when seeking employment. Lack of attention given to this group may result in the inequalities of the past being perpetuated.

This research has looked at the role of higher education institutions in providing career services and the role of graduate recruiters with regards to graduate unemployment. Therefore policy recommendations are made to these two role players.

5.1.3.1 Recommendations to higher education institutions

Higher education institutions should consider their role when accepting students in fields of study shown by Moleke (2005, 2010) to have lower employment prospects and so should their admissions policy. As Cliff (2003) reports - higher education institutions have a moral responsibility to assist the students they accept to succeed in higher education, and possibly this moral responsibility should in some way extend to ensuring graduates enter the work place.

The career services they offer should take into account factors outside of the students' control that influence their employability. Specifically historically Black institutions could be mandated to run graduate employment fairs. Additionally resources required to look for a job such as computer and internet access could be extended to graduates who do not have access to these services when they leave the higher education institution. As most jobs are secured through networks higher education institutions could look at alternative ways of connecting employers and graduates beyond the current graduate recruitment fairs.

There is a lack of research on the long term effects of career services (SAQA, 2013) and therefore career services should ensure research is done with the aim of informing and improving the services they offer. Without this evaluation of their

services, their ability to serve the needs of changing student populations is questionable and the current emphasis on one-to-one counseling and assessment is likely to be sustained.

The National Student Financial Aid Scheme aims to provide poor learners with the financial means to study at tertiary education. However, their rules around the allocation of loans may serve to perpetuate the cycle of poverty to some extent. Therefore, higher education institutions should acknowledge and address the extent to which financial difficulties restrict learners from studying at their higher education institution of choice and in a qualification of their choice.

Lastly, higher education institutions should acknowledge and address the presence of illegal recruitment practices which affects their students and graduates. They could articulate their role in overseeing or monitoring recruitment as well as play a significant role in ensuring recruitment law is followed. I suggest that in order to both measure and reduce illegal recruitment practices that this be addressed at institutional policy level.

5.1.3.2 Recommendations to graduate employers

Graduate employers, too, should acknowledge both individual and structural factors affecting graduate employment and unemployment. In addition to this they must acknowledge that all graduates do not have equal opportunities in the labour market due to structural factors and pre-existing inequalities.

This research has shown how the process and cost of a job application can prevent low-socio economic status individuals from accessing adverts and applying for work. Therefore, recruitment polices should ensure that recruitment practices do not systematically disadvantage the poor. How this can be done is unknown, but at the very least employers should acknowledge how their advertising and application process assumes that all potential employees have the resources required to access their adverts and apply for positions. There appears to be a current conundrum whereby job adverts that are fairly easily and cheaply obtained and therefore an attractive approach to poorer job seekers (that is newspapers), often entail expensive recruitment processes that are then unattractive to poorer job seekers (that is scanning and faxing documents). This example provides evidence

that employers could consider their application processes and the effects thereof more critically.

Employers should also acknowledge that individuals spend large sums of money in applying for work, and for some people this cost affects their entire household adversely. In acknowledging this, I believe recruiters have a moral responsibility to give honest and timeous feedback to applicants through a means that is accessible to them. Employers should be aware that both lack of feedback, as well as dishonest feedback, plays an important role in the overall understanding of graduate employment in general but also at considerable cost to the individual applicants.

Recruitment research (e.g. Schoer, et al., 2012) has confirmed that most jobs are secured through networks. However, unfortunately the findings give very little insight as to how these networks operate. More research is needed, for example, regarding the practice of networking, the effects of networking on those already removed from the labour market, and on the distinction between networking and nepotism. While it is understandable why employers recruit through personal networks, recruitment policy should acknowledge and address (1) how these networking practices advantage individuals with links to the labour market through employed family members and friends and systematically disadvantages people with fewer employed family and friends, and (2) there likelihood that nepotism will occur.

5.2 Summary

The feasibility of this research ensured that it was executed according to the research plan. The research questions justified a mixed methods approach and therefore the methods and data analysis allowed for the broad research aim and the four specific research objectives to be met.

The prevalence of unemployment for those who are looking for work was 5.1%. This is likely to be a conservative indication as the sample overrepresented groups shown to have lower prevalence of graduate unemployment. These groups are males, Whites and post-graduates. Graduate unemployment was significantly related to numerous demographic and educational factors. It was significantly higher for the Black race group, for low socio-economic individuals who reported difficulty accessing various resources required to look for work, and for those who have spent the majority of their lives in a rural area. It was also higher for graduates from a university of technology, those with undergraduate certificate, diploma, or degree qualifications, and those who studied humanities. Interestingly having received career guidance was not significantly related to unemployment status, bringing into question the role of higher education institutions' career services in relation to the employment of their graduates.

The perceived cause of graduate unemployment centered on the expense of resources required to look for work, the high cost of looking for work and graduate recruitment practices that appear to favour those who are already attached to the labour market or who can afford to influence the recruitment process. Career services that are available to students but not to graduates could potentially inhibit graduates ability to look for work. Additionally some assumptions of higher education's career services were questioned, such as the emphasis placed on the individual and the choices they make, at the expense of considering the individual within their context.

In conclusion, enabling access to higher education to previously disadvantaged groups is one of South Africa's ways of attempting to address inequalities of the past and lead the country towards increased prosperity. However, some current higher education systems and services work

against this strategy and unintentionally disadvantage poor students by for example, limiting learners' higher education choices due to their reliance on loans, delaying graduation, and providing career services that are possibly ineffective and concurrently not available to graduates. In addition to this graduate employment practices can also disadvantage poor graduates through discriminatory recruitment and the presence of nepotism and bribery.

Taken together there are numerous risks and vulnerabilities that poor graduates face that will likely result in their higher chances of unemployment. In turn, this unemployment perpetuates their low socio economic status. In studying both individual and structural factors that relate to graduate unemployment, researchers can better understand how poor students and graduates are systematically disadvantaged from entry into higher education, through their studies, and into employment (or unemployment). If South Africa is going to succeed in fighting poverty through provision of higher education, then a critical analysis of graduate unemployment is needed to inform, amongst other things, both higher education institutions' and graduate employers service and practices.

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Appendices

Appendix 1: Current higher education institutions, the merged institutions from which they were formed and these institutions historical status respectively

Universities		
University of Cape Town	University of Cape Town	HWI*
University of Fort Hare	University of Fort Hare and Rhodes University (East London Campus)	HBI and HWI
University of the Free State	University of the Free State, Vista University (Bloemfontein) and University of the North (Qwaqwa)	HWI, HBI and HBI
University of KwaZulu-Natal	University of Durban-Westville and University of Natal	HBI and HWI
University of Limpopo	University of the North and Medical University of Southern Africa	HBI and HBI
North-West University	Potchefstroom University for Christian Higher Education, University of North-West and Vista University (Sebokeng campus)	HWI, HBI and HBI
University of Pretoria	University of Pretoria and Vista University (Mamelodi)	HWI and HBI
Rhodes university	Rhodes University	HWI
Stellenbosch University	Stellenbosch University	HWI
University of the Western Cape	University of the Western Cape and Stellenbosch University Dental School	HBI and HWI
University of the Witwatersrand	University of the Witwatersrand	HWI
Comprehensive Universities		
University of Johannesburg	Rand Afrikaans University, Technikon Witwatersrand and Vista University (East Rand and Soweto)	HWI, HWI and HBI
Nelson Mandela Metropolitan University	University of Port Elizabeth, Port Elizabeth Technikon and Vista University (Port Elizabeth)	HWI, HWI & HBI
University of South Africa	University of South Africa, Technikon SA and Vista University Distance Education Centre	HWI, HBI and HBI
University of Venda	University of Venda	HBI
Walter Sisulu University	University of Transkei, Border Technikon and Eastern Cape Technikon	HBI, HWI & HBI
University of Zululand	University of Zululand	HBI
Universities of Technology		
Cape Peninsula University of Technology	Cape Technikon and Peninsula Technikon	HWI & HBI
Central University of Technology, Free State	Technikon Free State and Vista University (Welkom)	HWI & HBI
Durban University of Technology	ML Sultan Technikon and Technikon Natal	
Tswane University of Technology	Vaal Triangle Technikon , Technikon Northern Gauteng and Technikon North-West	HWI, HBI & HWI
Vaal University of Technology	Vaal Triangle Technikon and Vista University (Sebokeng)	HWI & HBI
Mangosuthu Technikon	Mangosuthu Technikon	HBI

*Historically White Institution (HWI); Historically Black Institution (HBI)

Appendix 2: Quantitative sampling frame

Magnet Communications Survey	**SAPS 2010 1**		**SAPS 2011**		**SASS 2009 2**		**SASS 2010**		Total	
	#	%	#	%	#	%	#	%	#	%
Male	3588	63.43%	3230	64.55%	966	46.67%	2833	42.26%	10617	54.63%
Female	2069	36.57%	1774	35.45%	1104	53.33%	3871	57.74%	8818	45.37%
Total	5657	100.00%	5004	100.00%	2070	100.00%	6704	100.00%	19435	100.00%
Black	1339	23.42%	1352	27.89%	1339	65.73%	4983	76.00%	9013	47.05%
Coloured	304	5.32%	228	4.70%	118	5.79%	350	5.34%	1000	5.22%
Indian	733	12.82%	458	9.45%	129	6.33%	294	4.48%	1614	8.42%
White	3341	58.44%	2809	57.95%	451	22.14%	930	14.18%	7531	39.31%
Total	5717	100.00%	4847	100.00%	2037	100.00%	6557	100.00%	19158	100.00%
Business/commerce/management	2087	36.90%	1485	29.59%	1103	53.05%	3578	58.84%	8253	43.82%
Engineering/technology	1944	34.37%	1920	38.25%	286	13.76%	1062	17.46%	5212	27.67%
Sciences	448	7.92%	641	12.77%	240	11.54%	855	14.06%	2184	11.60%
Humanities/liberal arts	679	12.00%	555	11.06%	320	15.39%	116	1.91%	1670	8.87%
Law	238	4.21%	215	4.28%	77	3.70%	268	4.41%	798	4.24%
Health care/health sciences	260	4.60%	203	4.04%	53	2.55%	202	3.32%	718	3.81%
Total	5656	100.00%	5019	100.00%	2079	100.00%	6081	100.00%	18835	100.00%
Cape Peninsula University of Technology	151	2.81%	152	2.83%	127	2.37%	651	11.08%	1081	4.92%
University of Cape Town	216	4.02%	216	4.02%	216	4.04%	216	3.68%	864	3.93%
Central University of Technology	56	1.04%	56	1.04%	56	1.05%	56	0.95%	224	1.02%
Durban University of Technology	251	4.67%	251	4.67%	251	4.69%	251	4.27%	1004	4.57%
University of Fort Hare	8	0.15%	8	0.15%	8	0.15%	8	0.14%	32	0.15%
University of the Free State	455	8.46%	455	8.46%	455	8.50%	455	7.74%	1820	8.28%
University of Johannesburg	305	5.67%	305	5.67%	305	5.70%	305	5.19%	1220	5.55%
University of KwaZulu-Natal	613	11.40%	613	11.40%	613	11.45%	613	10.43%	2452	11.16%
University of Limpopo	9	0.17%	9	0.17%	9	0.17%	9	0.15%	36	0.16%
Nelson Mandela Metropolitan University	266	4.95%	266	4.95%	266	4.97%	266	4.53%	1064	4.84%
North West University	102	1.90%	102	1.90%	102	1.91%	102	1.74%	408	1.86%
university of Pretoria	585	10.88%	585	10.88%	585	10.93%	585	9.96%	2340	10.65%
Rhodes University	79	1.47%	79	1.47%	79	1.48%	79	1.34%	316	1.44%
University of South Africa	616	11.46%	616	11.46%	616	11.51%	616	10.48%	2464	11.21%
University of Stellenbosch	1169	21.74%	1169	21.74%	1169	21.84%	1169	19.89%	4676	21.27%
Tswane University of Technology	118	2.19%	118	2.19%	118	2.20%	118	2.01%	472	2.15%
University of Venda	10	0.19%	10	0.19%	10	0.19%	10	0.17%	40	0.18%
Vaal University of Technology	54	1.00%	54	1.00%	54	1.01%	54	0.92%	216	0.98%
Walter Sisulu University of Technology	15	0.28%	15	0.28%	15	0.28%	15	0.26%	60	0.27%
University of the Western Cape	29	0.54%	29	0.54%	29	0.54%	29	0.49%	116	0.53%
University of the Witwatersrand	248	4.61%	248	4.61%	248	4.63%	248	4.22%	992	4.51%
University of Zululand	7	0.13%	7	0.13%	7	0.13%	7	0.12%	28	0.13%
MUT	14	0.26%	14	0.26%	14	0.26%	14	0.24%	56	0.25%
Total	5376	100.00%	5377	100.00%	5352	100.00%	5876	100.00%	21981	100.00%

1 South African Professionals Survey, 2 South African Student Survey

Appendix 3: Survey questionnaire

Moved to end of report

Appendix 4: Email to participants

Date: Wed, 11 Jul 2012 15:17:12 +0200
From: Kim.Baldry@students.wits.ac.za
To: kimbbaldry@gmail.com
Subject: Graduate Employment Survey

Dear Graduate

My name is Kim Baldry and I am conducting research for the purpose of obtaining a master's degree in psychology through the University of the Witwatersrand. I am interested in exploring Graduate Employment (and unemployment) in South Africa and would greatly appreciate your input.
If you have obtained a qualification from a public South African Higher Education Institution, I would like to invite you to participate in my study. Participation is voluntary and no individual will be advantaged or disadvantaged in any way by choosing to participate or not participate in the study. If you would like to participate, please take 10-15 minutes to answer the survey by following the link below. The survey will be open for 8 weeks (closes 4 September).

https://www.surveymonkey.com/s/PQ6JZ9

Please contact me if you have any questions.

Thank you in advance.
Kim Baldry
082 599 2592

Appendix 5: Interview guide

This is a guideline. Conversation should be authentic and not read from the paper.

Introduction

This study is for my master's degree at Wits University and is on the topic of Graduate Unemployment. Based on your answers to the survey questionnaire that you completed around two months ago, I have selected you to be interviewed.
I will ask you a few questions but please talk freely and openly, you can interrupt me or say anything unrelated to the question if you like at any time.

Everything you say is confidential, and your name will not appear anywhere in my report. The interview will be recorded and if direct quotations from your interview are published in my report then you will be assigned a pseudonym to ensure confidentiality. The recording and transcript will be kept on my computer which is password protected, so no-one other than myself can access this interview. You may refuse to answer any questions and you may stop the interview at any stage if you do not want to continue. We should take around 30 minutes. If necessary and if you agree, I may phone you back with a few follow up questions.

Questions

1. To begin with can you tell me when you finished Grade 12 and what you have done since finishing high school? Follow up with probing questions such as;
- How did you choose your course?
- Who paid for your course? Etc.

2. In the survey you said that you are currently unemployed and looking for work, is that still the case? Follow up with probing questions such as;
- How have you looked for jobs in the past?
- What was good/positive about these jobs or about the experience of looking for work?
- What was bad/negative about these jobs or the experience of looking for work?
- What do you think makes it difficult for you to find work?

3. What do you think you university did well with regards to preparing you for work, or preparing you to look for work?

4. What do you think you university should have done better with regards to preparing you for work or preparing you to look for work?

5. Is there anything else that you would like to tell me that might assist me in understanding graduate unemployment that you haven't already said?

Please SMS me if you would like me to phone you back for any reason, maybe you would like to add something to you interview, or even if you want to withdraw from the research.

Appendix 6: University clearance letter

UNIVERSITY OF THE WITWATERSRAND. JOHANNESBURG

HUMAN RESEARCH ETHICS COMMITTEE (SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT

CLEARANCE CERTIFICATE

PROJECT TITLE:	Graduate unemployment in South Africa: Prevalence, characteristics and perceived causes
INVESTIGATORS	Baldry Kim
DEPARTMENT DATE	Psychology
CONSIDERED DECISION OF	04/05/12
COMMITTEE*	Approved
PROTOCOL NUMBER: MPSYC/12/011 IH	

This ethical clearance is valid for 2 years and may be renewed upon application

DATE: 20 June 2012

CHAIRPERSON
(Professor K Cockcro]

cc Supervisor:

Prof. B Barnes
Psychology

DECLARATION OF INVESTIGATOR (S)

To be completed in duplicate and one copy returned to the Secretary, Room 100015, 10th floor, Senate House, University.

1/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure, as approved, 1/we undertake to submit a revised protocol to the Committee.This ethical clearance will expire on 31 December 2014

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES