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Employment barriers for South African graduates

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Employment barriers for South African graduates

Matthew Ash

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A consultancy report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

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DECLARATION

I, Matthew Ash, declare that this consultancy report is my own work, except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Matthew Ash

Signed at ……

On the …….. day of …… 20…..

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Supplementary files:

Rey-Alicea's 2007 work readiness results

Max-Neef fundamental human needs matrix

Template survey questionnaire

Sample questionnaire (word readiness cohort)

Sample questionnaire (unemployed graduates)

Sample questionnaire (employers)

Qualitative questionnaire

Impact of work readiness programme 2017 (results)

Key to question 1 charts

Key to question 2 charts

Numerical table of results question 1

Numerical table of results question 2

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EXECUTIVE SUMMARY

Networx for career development (CC) embarked on the implementation of a government-funded work readiness programme in 2017, which was run in conjunction with the Transport Education Training Authority (TETA) in South Africa. The project was very successful and achieved a 68% absorption rate for the unemployed graduates who took part in the programme. Broadly, for the purpose of this report, absorption means the percentage of graduates who obtained employment as a direct result of participating in the work readiness programme.

Based on the success of the work readiness programme, the stakeholders of the programme wanted to ascertain ways in which they could improve the current programme, by identifying the possible barriers to employment that exist for some South African graduates. The question of 'what are the perceived barriers for employment that exist for some graduates' was investigated, because the stakeholders realised they were potentially treating the problem of graduate unemployment and wanted to first understand the causes of unemployment for some South African graduates. This report is, therefore, intended to identify and then recommend possible solutions to unemployment for some South African graduates.

The recommendations from this consultancy report will be used to produce a framework for another study that will look to alleviate the main barriers to graduate unemployment in South Africa identified from this report. Recommendations will be made from any clearly identified trends that are established from the results of the survey that are supported by the literature, previous research and data that was analysed from the literature review. If any trends are identified that do not support any past research or literature, then possible suggestions will be recommended for potential further studies.

The results of this report will show that the most significant perceived barrier for graduates achieving employment in South Africa is a lack of skills that employers are looking for. The report will recommend that further studies be undertaken to ascertain exactly which skills are required by employers.

The report will also show that from the gathered data, the two most effective measures for alleviating graduate unemployment are the creation of jobs outside of the major economic hubs in South Africa, and the establishment of a work readiness programme for all South African graduates. Recommendations will also be made with regards to further studies regarding a framework that should be put together to identify what a work readiness programme should look like in South Africa.

Keywords: Graduate | Unemployment | Barriers to employment | Work readiness programme | South African graduates

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"*A degree and a deep desire isn't always enough in SA''* (Pitso, 2017). This statement may encapsulate the perception of some South African graduates seeking employment in South Africa. This report will identify barriers that exist and act as hindrances for some South African graduates in achieving employment. Once these barriers have been identified this report will then give recommendations to overcome the identified barriers for South African graduates.

1.0 Context

The South African unemployment rate stood at 27.7% in Stats SA's quarterly labour force survey, published on 01 June 2017. The unemployment rate of the graduates within South Africa "remained at 7.3%," (Stats SA, 2017). Some research points to the figure for graduate unemployment being a fallacy (Altbeker & Storme, 2013), and that graduate unemployment is on par with the rest of the world (Van Der Berg, 2012). However, other research says the number is, in fact, a lot higher for graduates in South Africa (Oluwajodu & Blaauw, 2015).

Many stories of disillusionment have made headlines in South Africa, including that of Lindelani Madonsela, who graduated with a public management degree from the University of Pretoria in 2011, and five years later found he was begging for a job on the street (Mngoma, 2016). The *Daily Maverick* reported, "the unemployment rate among graduates is 7.3%," (*Daily Maverick*, 2017), which does not appear very high. Thus, this report will look to ascertain why there are inconsistencies in perceptions and give credible solutions and recommendations to removing barriers for employment for some South African graduates.

One problem with graduates finishing tertiary education and not being able to find gainful employment is the ripple effect on society. A whole family, and even an entire community, can suffer because of the financial and emotional trauma that comes from someone being unemployed. The fundamental human needs that are affected by a graduate being unable to find employment are large, and could lead to psychological and social issues (McClelland, 1998). This

disruption of fundamental human needs (associated with the graduate being unable to secure the means to provide for their basic physiological needs), has the potential to manifest into social and psychological issues for the individual – and society – at large.

2.0 Purpose

Some graduates in South Africa appear to be encountering barriers when it comes to finding employment in South Africa, for a variety of reasons. This report will ascertain what the greatest perceived barriers are for these South African graduates who are seeking employment, and then make recommendations to alleviate the barriers these graduates are facing.

The aims of this consultancy report are as follows:

1. To ascertain why some graduates in South Africa are not finding sustainable employment, and
2. To make recommendations to alleviate barriers to employment for South African graduates.

3.0 Review of prior research

3.1 Ascertaining why some graduates in South Africa are not finding sustainable employment

The report will consider the views of different stakeholders directly involved in graduate unemployment, in an attempt to obtain different views on what the perceived greatest barriers are for some graduates finding employment. After the views have been considered and analysed, recommendations on practical solutions to solve the problem and reduce the burden of unemployment for graduates in South Africa will be made.

The issue may not arise from the period between graduating and being employed, but could start earlier in a graduate's life. Therefore, the report will look at some of the higher- and lower-schooling stages (Howie & McLeod, 2016) of graduates who have attended university. High school outputs, and the

potential link between high school grades and the qualification with which graduates leave university, will be examined to see if there is a link between performance at school and future employability.

The potential causes of graduate preparedness in order to find employment will be researched to ascertain if a lack of fundamental education or softer skills leads to unemployment for graduates and if this stems from the foundation stages of a graduate's life. It is perceived that high school leavers are not prepared for university in terms of basic understanding of maths literacy and science, and as a result, they will be underprepared for university (Van den Berg, 2008; Reddy and Naill, 2014). If learners are not prepared for university, then it is assumed that these same learners will struggle to graduate with good grades, if they graduate at all (Dell, 2010).

South Africa, like all other countries, needs skills in order to achieve economic viability and having a vast number of unemployed people creates a burden on society in a number of different ways. Pop argues that when graduates are looking for employment, they do not always have practical skills (Pop, 2010). Pauw, *et al*. support this view, when they state from their findings that "firms feel that graduates often do not possess necessary skills even to be considered for entry-level positions," (Pauw, 2006, p. 1). There is a large mismatch between the skills that employers need and those that graduates possess (Graham & D Lannoy, 2017). Findings from Baldry also suggest that there is a "skills mismatch between higher education supply and labour market demand," (Baldry, 2015, p. 789). Analysis of the literature from Pop, Graham, Baldry and Pauw support the view that skills desired by employers are not being supplied by the graduate labour force.

In a report by the Centre for Development and Enterprise (CDE), a significant finding to note is one of the leading causes of confusion is how people define a graduate (Altbecker, 2013). The report states that one of the fundamental things that can potentially be misleading or confusing (Altbecker, 2013) in a South African context is that the word "graduate" is used to define "anyone who has achieved a tertiary education," (Altbecker, 2013, p. 4). It will not be within the scope of this study to ascertain the definition of a graduate; however, for the

purposes of this report, a graduate is any recipient of a tertiary qualification who is preparing to make the transition out of full-time study into full-time employment.

In the context of the report, it will be vitally important to establish from stakeholders if they believe the correct graduate qualifications are being achieved in order to find employment within industry. The reports and literature that have been analysed reveal that South African graduates are not always prepared for tertiary education because they lack the fundamental entry requirements to enter university. Resultantly, this report will investigate if some South African graduates are not obtaining relevant qualifications from tertiary institutions.

A major problem cited by Baldry is that temporary and part-time employment has been masked in making employment figures for graduates seem "better than they actually are," (Baldry, 2015, p. 789). This refers to graduates who are employed on a temporary employment basis but who would ideally like a job that provides more hours of work (Beukes, 2016), and these are included in figures that report total graduate employment; whereas graduates researched in Baldry's report indicate that a temporary position renders graduates feeling underemployed. Beukes' (2016) report supports Baldry's, to the extent that both feel that although graduates are technically working if they have a temporary or part-time job, they are at a high risk of receiving "low levels of remuneration, short working hours, skill under-utilisation and a mismatch of skills and knowledge," (Reynolds, 2012).

A misconception for some graduates entering the world of work can be highlighted from a quote in Oxenbridge's 2012 study from a graduate:

> "I thought the workplace would be about 100 people sitting in the same room doing the same thing. I thought it would be like school except you get paid for it," (Oxenbridge & Evesson, 2012, p. 10).

There is not only a mismatch in perceptions towards work from graduates, but also in the need for employers requiring graduates with high emotional intelligence. Employers "seek graduates with high levels of emotional

intelligence, but frequently believe students lack such capabilities," (Jameson, 2016, p. 515). Rey-Alicea (2007) supports the desire for employers to hire graduates with an increasing emphasis on soft skills, including emotional intelligence. Jones agrees, stating that by enhancing emotional intelligence skills graduates can enhance their chances of becoming employed (Jones, 2008).

Emotional Intelligence is defined by Mayer and Salovey as

> *"the ability to perceive emotions, to access and generate emotions so as to assist thought to understand emotions and emotional meanings, and to reflectively regulate emotions so as to promote both better emotion and thought," (Mayer & Salovey, 1997, p. 22).*

As the literature by Jameson suggests, emotional intelligence is an attribute that employers feel is lacking in graduates. Thus, this research will look to understand if it is a perceived barrier in a South African context for graduates who are seeking employment.

3.2 Potential solutions to alleviate barriers to employment for graduates

Effective labour market programme initiatives positively impact societies (McQuaid & Lindsay, 2005). This statement is supported by "workplace engagement prior to post-study employment offers a range of benefits," (Oxenbridge & Evesson, 2012, p. 5), and these are not just limited to individual benefits, but benefits for society as a whole. Findings from the literature state that an effective work readiness programme for graduates could be used to bridge potential skills gaps so that graduates can achieve employment.

Different international work readiness programmes were reviewed to ascertain if any recommendations from these studies could potentially be identified to assist in implementing a model that would assist in alleviating graduate unemployment in South Africa. A review of a survey carried out by Rey-Alicea and Scott

(2007), of selected American work readiness programmes, showed that work readiness programmes need to be tailored specifically to the target graduates. Their results will be looked at to see if the same findings should be implemented in South Africa and these could potentially form the framework for future research.

A study by Oluwajodu highlighted that “many graduates have a bad attitude towards work [yet still] expect to be paid a high salary,” (Oluwajodu & Blaauw, 2015, p. 5). The report goes on to suggest that graduates are unaware of the importance of work experience (Oluwajodu & Blaauw, 2015), and this suggests that a programme that offers paid experience prior to gaining full-time employment may assist graduates in obtaining employment. To support the importance of work experience, Archer states that, “it is more important than a qualification,” (Archer, 2010, p. 1). However, due to severe inequality in South Africa, “youth average per capita income stands at R527 per month,” (Graham & D Lannoy, 2017). Therefore, a paid form of work experience for graduates in South Africa might need to be implemented to entice graduates to potentially undertake a paid work experience programme.

Recommendations from other reports analysed appear to support that softer skills namely, “self-management, communication skills, confidence and showing initiative,” (Oxenbridge & Evesson, 2012, p. 4), were the attributes that graduates felt were most desirable for employers. A study by McKinsey stated that, “low teacher effort is often considered one of the most serious problems in South African schooling,” (McKinsey, 2007). A report by the Democratic Alliance (DA) purpoted that a key to success was quality education being delivered in South African schools (Democratic Alliance, 2013) therefore, investigations will be made to discover if improving soft skills and basic education is viewed as a way of alleviating unemployment for graduates.

Emotional intelligence was another competency that respondents in the Oxenbridge report felt were desired from graduates by employers. Rey-Alicea’s (2007) study suggested that school-based experience was something that would increase graduates’ preparedness for the world of work. As Jameson purports, employers are more favourable towards candidates with high levels of

emotional intelligence (Jameson, 2016), thus, the promotion of emotional intelligence at a tertiary level may assist employers wanting to employ graduates. This will also be researched to see if promotion of emotional intelligence is viewed as an effective measure of alleviating graduate unemployment.

Another reason offered for graduate unemployment by Graham and De Lannoy, is that graduates who live outside of major economic hubs spend more time looking for employment (Graham & De Lannoy, 2017). This report will look to establish if geographical location is a barrier to employment. Relocating public sector jobs outside of economic hubs is a policy that can be used to effectively create employment outside of city centres (Centreforcities, 2017). An article by Brand South Africa (2012) supports the need for creating special economic zones (SEZs) outside of Cape Town and Gauteng, as a way of stimulating growth in South Africa, and expanding these zones could be a way of increasing graduate employment.

Stakeholder feedback in this consultancy report will be critical because it is ultimately those very stakeholders who will be directly affected by the findings of this report. If a solution can be found to better manage the placement of new graduates, a proactive channelling system could be established to empower future generations of graduates to overcome barriers to employment. This could assist South African education bodies in enhancing the skills of students to prepare them for employment (Von Treuer, Sturre, Keele, & McCleod, 2011). Fundamentally, the report will investigate commonalities for graduates who are caught in the unemployment trap. Upon identifying these barriers, recommendations will be made on how these barriers could possibly be overcome. The report is not intended to point fingers at any of the stakeholders, but rather to finding out the root causes of the issue of graduate unemployment, and finding possible solutions to those barriers.

Although many studies look at the high number of black graduates that are unemployed in South Africa, this research will not be limited to any specific racial background and will look at graduates in their totality in South Africa. Therefore, this report may look at information that looks specifically at racial

background, but will try to use the information inclusively, as opposed to specifically looking at different racial backgrounds.

The analysis of the literature available has shown that there is a high level of graduate unemployment in South Africa, but there appears to be conflicting evidence with regards to the extent of the problem. In certain reports, graduate unemployment is high, whilst others state that graduate unemployment is low (Van Der Berg, 2012). As it is fairly straightforward to find examples of graduates who are unemployed, this report will look to see if the definitions of employment are being met.

3.3 Graduates in South Africa who cannot find employment and the effects on their fundamental human needs

This section of the report will aim to provide guidance on what defines employment and what the expectations of both graduates and employers are, to understand if there is a disconnect between these stakeholders' expectations. The review will look at defining what employment is, to ascertain if employment is being created for graduates.

The report intends to discover what stakeholders define as gainful employment in order to ascertain if employment is being created. A commonly used word is the "absorption" rate of any graduate programme, specifically those tasked with attempting to make an impact on the graduate sector of the labour force. Programmes are often targeted with anywhere up to a ninety per cent absorption rate (Department of Environment Affairs, 2017), whilst others are as low as fifty-five per cent (Bank Seta, 2017). It is perceived that many graduates are being absorbed by internship programmes and learnerships that only pay a stipend, and this could cause unintended consequences for employers and graduates alike.

A definition that comes from Ledrut says that employment is, "more or less a high probability, that a person looking for a job can find one," (McQuaid & Lindsay, 2005, p. 201). The Confederation of British Industry (1999) defines employability as "the possession by an individual of the qualities and competencies required to meet the changing needs of employers and

customers and thereby help to realise his or her aspirations and potential in work," (CBI, 1999, p. 1).

The literature states that jobs need to be available when people are looking for them, and that people need to have the correct skills in order to find employment. It shows that unless graduates have the correct skills, "qualities and competencies," (CBI, 1999, p. 2) then even if work is available they will struggle to find employment unless their qualification meets the skills gap.

4.0 Management theory pertinent to research

Since the 1950s, human relations' theory has been studied. Pre-World War II, most theory was based on scientific management, which focused on efficient labour (Mulder, 2017). Elton Mayo was one of the first management theorists who looked at human relations theories, with his well-known Hawthorne effect, which concerns respondents participating in research (McCambrdge & Witton, 2014). Mayo began his studies in the 1920,s to see if different working conditions had an effect on how employees performed (different light, extended breaks, etc.), to discover if there was any effect on the way workers performed.

Mayo's work was groundbreaking, but as more and more research is conducted, his theory has become outdated (McCambrdge & Witton, 2014). However, the theory is pertinent for the purpose of this study because respondents will know they are being surveyed and this could possibly lead to bias in their answers (McCambrdge & Witton, 2014).

4.1 Effect of unemployment on fundamental human needs

Mayo's research clearly shows that there is a link between individual needs and the way individuals perform and identify different consequences of not satisfying needs on a social, physical or even psychological level (Kumar, 2016). Therefore, his work is very useful in showing a link between human needs not being satisfied, and how a positive outcome can be derived if needs are fulfilled. This is beneficial to this research because it highlights that there is a direct link

between needs (group and individual) being satisfied and positive outcomes for society.

A theorist that looked at human needs from a different perspective is Manfred Max-Neef, who expanded on Maslow's theory of human motivation (Petrrakis, 2014), by looking at human needs from an economic perspective (Petrrakis, 2014). This theory is very important for the relevance of this report, because it allows the outcomes to be based on what could happen for the South African economy, if the fundamental human needs of graduates are not satisfied. If the human needs of graduates are currently not being satisfied due to unemployment, then Max-Neef's theory will enable us to look at the effects of neglecting these needs. Needs and satisfiers have no hierarchy (Petrakis, 2014), but by not satisfying the need for having thorough education and employment, an individual's human needs are dramatically affected.

Very few people understand what fundamental human needs are (Heald, 2016), but without satisfying these needs, it is possible that large problems could occur, not only for individuals but also for society (Max-Neef M. , 1991). Max-Neef states that the consequences of not satisfying fundamental human needs, are problems that affect not just individuals but economies, societies, cultures and policies (Max-Neef M. , 1991).

Max-Neef's matrix looks at human needs in two columns: axiological needs (things we value) and existential needs (satisfiers of the things humans need).

The fundamental concept underpinning the Max-Neef matrix is that of understanding. If understanding is not fulfilled as a point of departure, then the matrix breaks down. If South African graduates are being satisfied, then economic growth will be stimulated (Petrakis, 2014). By graduates being unemployed, the matrix shows that many different needs and satisfiers are subjected to what Max-Neef calls a "roller coaster" experience, and involves four stages: (1) Shock (2) Optimism (3) Pessimism and (4) Fatalism, which affect all those who are unemployed (Max-Neef M. , 2005). The whole matrix is interrelated, and inter-correlates (Petrakis, 2014) so fundamentally, graduates being denied employment affects them on many different levels.

Oluwajodu infers that if graduates are unable to find a first job, the “effect can be devastating and last a lifetime,” (Oluwajodu & Blaauw, 2015, p. 3). Thus, the identification of the actual barriers to graduate unemployment is essential to establish because a generation could be saved if a solution is found.

The literature available shows that if graduates (or any human being) are denied access to employment, then their basic fundamental human needs are affected. Studies have already shown that fundamental human needs are affected by unemployment, so the effects of human needs will fall outside the scope of this research because the link has already been established by prior research.

The findings from this analysis of the literature find that there are potential barriers to entry for some graduates in South Africa, thus my research is aiming to analyse these barriers for South African graduates, and then make recommendations for overcoming the barriers.

5.0 Propositions

5.1 Why some graduates in South Africa are not finding sustainable employment

1. The foundation phase of some graduates’ school life is affecting their grades when they graduate, and this makes them less desirable to employers. (Van den Berg, 2008; Dell, 2010; Reddy & Naii, 2014; Baldry, 2015; Howie & McLeod, 2016)
2. Graduates do not always have the correct skills and competencies. (Pauw, 2006; Pop, 2010; Graham & Arriane, 2017)
3. When reporting figures on graduate unemployment, reports do not distinguish between the types of tertiary qualification that graduates have achieved. (Altbecker, 2013)
4. Graduates are not being offered sustainable full-time employment. (Reynolds, 2012; Baldry, 2015; Beukes, 2016)

5. Graduates tend to have low emotional intelligence when they finish tertiary education. (Rey-Alicea & Scott, 2007; Jones, 2008; Oxenbridge & Evesson, 2012)

5.2 Recommendations to alleviate barriers to employment for South African graduates who struggle to find employment

1. Effective labour market programmes need to be implemented in South Africa for the graduate sector. (McQuaid & Lindsay, 2005; Rey-Alicea & Scoot, 2007; Oxenbridge & Evesson, 2012)
2. Graduates who encounter problems when trying to find employment need to be put into a form of employment that provides remuneration. (Archer, 2010; Oluwajodu & Blaauw, 2015; Graham & Arriane, 2017)
3. The South African foundation phases of schooling need to be more effective for both academic and emotional attributes for graduates. (Mckinsey, 2007; Oxenbridge & Evesson, 2012; Democratic Alliance, 2013)
4. Graduates should be encouraged to become aware of the need for emotional intelligence and programmes implemented to enhance graduates' emotional intelligence. (Rey-Alicea & Scott, 2007; Oxenbridge & Eveson, 2012; Jameson, 2016)
5. Employment opportunities for graduates need to be created outside the traditional economic hubs within South Africa. (Brand South Africa, 2012; Graham & Arriane, 2017; Centreforcities, 2017)

6.0 Methodology

Previous research that has been analysed identified two key trends concerning the way in which data was collected and analysed. Van Der Berg and Van Broekhuizen (2012) used multiple data sources, such as labour review surveys, in order to collect the data used in their report. This resulted in many charts and tables that were very academic in nature but could be very difficult to interpret as the charts appeared rather complicated. Due to the complicated way in which the data was presented, I did not want to utilise this format of presenting the results for this particular consultancy report. This report is intended for a

management team that wants to see clear results derived specifically from a previous work readiness programme, in order to improve future programmes.

The style of research methodology that I have decided to use for the purpose of this consultancy report is similar to the style adopted by Oluwajodou (2015), whose methodology consisted of mainly structured surveys and face-to-face interaction. The adopted approach used in Oluwajodou's report was pertinent for the purposes of this study because instead of utilising excessive amounts of raw data that could potentially cause confusion, the results were very simplistic and logical to follow.

Oluwajodu's style was selected for this report because the results need to be very specific to the graduate and employer cohorts, because they are going to be the only cohorts who can give their experiences from the Networx 2017 work readiness programme. The results need to be clear and concise and clearly focused on the cohorts who have taken part in the 2017 work readiness programme. Although the unemployed graduates did not take part in the work readiness programme, their opinions will be crucial in attempting to resolve the problem statements.

The methodology that will be utilised will attempt to show what graduates and employers perceive as the biggest barriers for graduates, when it comes to finding employment in South Africa. The methodology also analysed which recommendation was believed to be the most important for overcoming the barriers to graduate unemployment. These results then formed part of a structured interview with a service provider (Networx) who currently runs work readiness programmes for unemployed South Africa graduates.

Data was gathered from three sources:

1. A quantitative, ordinal ranking question was asked to three groups of respondents namely, unemployed graduates who had gone through a work readiness programme; unemployed graduates who had not gone through a work readiness programme, and employers who are involved in recruiting graduates. Each of these was asked to rank which of the five

propositions they thought was the most significant barrier to graduate unemployment in South Africa.

2. After answering the first question, the same set of respondents were then asked to rate, in another quantitative ordinal survey, how important they felt each of the identified propositions were for alleviating the identified barriers to graduates obtaining employment. A Lickert scale of the five recommendations was used, and respondents were asked to rate from “will have no effect” to “will have exceptional effect” on a scale of 1–7, with verbal labels next to each available answer.
3. A qualitative survey was undertaken with a representative from Networx, the company that has facilitated a work readiness programme to gauge the results of the surveys from all three of the sample sets.

The sample of graduates that was surveyed was estimated to be approximately 50 for those that were in the unemployed cohort, and approximately 50 for those that had gone through a work readiness programme.

Recently, the Transport Sector Education Training Authority (TETA) has run a work readiness programme via Networx, a company that operates in Fairlands, Johannesburg. This cohort of graduates was trained via my company (Business Today), with a board-based simulation to enhance their business acumen, in conjunction with other modules that were facilitated by Networx. Approximately 100 participants participated in the cohort for which I was directly involved in training. Therefore, I felt approximately half of the participants would take part in the survey, and this is how I derived my initial sample size of 50 respondents for my quantitative research, as that is derived from the number of participants that went through the programme from this cohort.

Data was also collected from unemployed graduates who had not gone through any kind of graduate employment programme. They were asked the same questions so that any trends could be identified between the data sets. The size of the data sample will be the same size as the number collected for those that had gone through the work readiness programme (50). By obtaining statistics from graduates who had completed the work readiness programme, and those that had not, I was then able to compare if there were any trends in the data.

Employers were also surveyed to compare if their answers differed to the same questions posed to the graduates. This would show if any trends existed between the two stakeholders with regards to barriers and solutions for graduate unemployment.

My reasoning of a sample size of approximately 30 employers for the employers' cohort was based on my thinking that it would be a number that was reasonable to collect, and would allow me to gauge trends for the purposes of analysis. I used a sample of approximately 100 for the combined total of graduates who had either gone through a work readiness programme or who are currently unemployed.

The quantitative data that was collected, from both graduate cohorts and employers, fed into a more structured qualitative interview with a representative from Networx who (as mentioned), was the company that had carried out the work readiness programme. This assisted me in ascertaining what they thought of the trends from the survey, and what they believed should form the framework of other interventions going forward.

The major advantages of using a rank ordering, for the barriers to graduate unemployment, is that responses will be "intuitive and independent of any response scale," (Stacey, 2006, p. 34), and this needs a space. This means that the data collected from respondents would be an intuitive response and would be potentially very useful, as no answer was derived from a pre-determined scale. However, as Stacey states, a major disadvantage with ranked responses is that data is limited to relatively simple descriptivism or is flawed because assumptions are made about interval level data (Stacey, 2006). Therefore, this type of data is not always perceived as attractive, because respondents may make assumptions about where they rank answers and may not know the difference between the ranks they give to different responses. The rating scale survey had potential flaws because, "the underlying psychological units may not be equal," (Stacey, 2005, p. 1), which meant that the responses of individuals might have been different depending on the respondents' own perception of the rating scale.

The reason only one ranking question was used, was because then I was able to ascertain if there were any perceived differences between the different data sets, about which was the biggest barrier to graduate unemployment in South Africa. This was a simple tool for deciphering from the data sets exactly what they thought was the most significant barrier for South African graduates.

A categorical response survey was used because they are “quicker, easier and less expensive than obtaining interval data,” (Stacey, 2005, p. 2). As some respondents were unemployed, it made logical sense to use this type of data collection, because some of the target audience may not have been able to give responses if an expensive data collection tool was used. A disadvantage to using this kind of data collection is that the variables are not always viewed as continuous (Stacey, 2005), and this could result in respondents not being able to effectively decide which of two variables was the most appropriate for them. Therefore, a seven-point scale, as opposed to a five-point scale, was used so respondents would have a greater chance of selecting their most appropriate response.

The advantage of using the quantitative method for the employers allowed me to obtain a high degree of respondent feedback in a minimal amount of time. As long as the respondents were informed beforehand about why the survey was being carried out, and what the intended outputs were, then it was assumed a high number of respondents would be willing to take part. To attempt to do a qualitative survey for a large number of respondents would have been very time consuming, and therefore it would not have been useful for the report.

The disadvantage of doing the categorical quantitative survey was that respondents might not have given a response (in the list of answers given in the survey), which the person being surveyed would have given had they been given an open-ended question. It was assumed that graduates who were unable to find employment would give answers, which while true, would have a fair degree of emotion attached to them because they were affected by the emotional trauma of not having their fundamental human needs satisfied. Another potential disadvantage was that some of the respondents’ first language might not have been English; but because the work readiness training

was carried out in English, it was assumed all the delegates spoke English. The online survey was also conducted in English so unemployed graduates needed to be able to read and speak English.

I, therefore, tried to obtain the following sample size of the population for my research:

- Graduates who had been through a work readiness programme – 50
- Graduates who had not been through any kind of work readiness programme (unemployed graduates) – 50
- Practitioners who are actively involved in recruiting graduates (employers) – 30
- Companies who have facilitated the implementation of a work readiness programme (Networx for career development) – 1

Table 1 Intended sample size of cohorts

Table of respondents: **Sample size of respondents for employment survey:**	
Description Of Respondent	**Sample Size**
Graduates who have taken part in a work readiness programme	50
Graduates who have not taken part in a work readiness programme (unemployed)	50
Practitioners who are actively involved in hiring graduates	30
Facilitating company who has carried out a work readiness programme together	1

In order to collect the data, I gathered a database of graduates who had completed the work readiness programme that I had been involved in training, and a separate database of those who had not completed a work readiness programme, from colleagues at university. From this, I compiled a set of email addresses and sent a preparatory email asking the graduates from both data

sets to complete the survey questionnaire. This was collated on a back-end database and all the results stored for analysis. The work readiness cohort was also part of a WhatsApp group, and information was also sent via WhatsApp.

Similarly, I gathered a database of employers who are actively involved in hiring graduates, and these will include human resource and recruitment practitioners. I compiled a set of email addresses and sent a preparatory email asking the recipients to take part in the survey. Their responses were collected and analysed in comparison with both sets of graduates. SMSs were also sent to employers, and telephonic calls were made to inform employers regarding the process that needed to be followed, and what was going to happen with regards to gathering the data.

6.1 Ethical considerations

Permission was obtained from all respondents prior to the completion of the survey in writing. The work readiness delegates, and the employer respondents were contacted prior to the event as previously stated to make them aware that their participation in the survey would be requested. Before completing the survey, these respondents were verbally made aware of the requirements of the survey and that participation was voluntary and that their anonymity was guaranteed. A disclaimer was also prominently displayed on the survey to obtain respondents permission to proceed.

Unemployed graduates who completed the online survey had a prominent notice displayed of the desired outcomes of the survey, and that their anonymity was also guaranteed. Respondents were asked to consent to take the survey or declining to take the survey or discontinue the survey at any time.

The principles and research ethics protocols from Stacey’s 2012 paper were followed during the completion of this report being:

Table 2 Stacey's 2012 principle of ethics protocols

Stacey's 2012 principle and research ethics protocols
Informed consent (granted by respondent)
Privacy of participants (confidentiality and anonymity)
Cognisance of vulnerable groups
Avoiding harm
Participants right to withdraw
Restricted use of data
Due care to storage of data
Avoidance of conflicts of interests

(Stacey & Stacey, 2012, p. 56)

The potential negative consequences that were considered for the purpose of this report were:

- The respondents from both the unemployed and work readiness cohorts could well have been from vulnerable groups due to the potential socio-economic circumstances of the respondents.
    - Respondents could have potentially felt the survey could have lead to an increase in their chances of employment, so care was taken to manage any potential expectation and information was supplied to respondents.

The potential negative considerations needed to be considered because even during the survey process, some respondents seemed to have reservations about the use of the data. All respondents were given a thorough briefing on the reasons for the survey and why their input was needed. However, if more information was required or respondents did not wish to carry out the survey

their views were respected. Consideration needed to be given to respondents who felt their responses potentially could be used for, “ethical or unethical individuals,” (Stacey & Stacey, 2012, p. 61) .

6.2 Data collection

The study was carried out using a survey questionnaire that consisted of one ranking question, with 5 (five) identified barriers to graduate employment, and then a separate rating question that asked respondents to rate 7 (seven) ways of alleviating graduate unemployment. The questionnaires were either collected manually, or online through a survey website (Qualtrics). Both data collection methods included exactly the same questions in relation to the identified barriers and potential solutions to alleviating unemployment. Two different questionnaire types were used, because two of the data sets, namely the employers and work readiness graduates, attended a graduation ceremony for the work-readiness programme and it would, therefore, be relatively easy to manually survey these two data sets. The cohorts of work readiness graduates and employers were given questionnaires at a graduation ceremony held on the 19th of January 2018 at the Apollo Hotel in Randburg. The results of these surveys were then manually collated onto spreadsheets and analysed by Professor Anthony Stacey. Although it was very difficult to find unemployed graduates who were willing to take part in the survey it was vitally important that the views of this cohort with regards to the problem statement were assessed. Thus the number of unemployed respondents was lower than initially anticipated. The unemployed graduates were defined as graduates who had not been through a work readiness programme, and they were asked to complete an online survey, and the results were again analysed by Professor Anthony Stacey.

The numbers of respondents and the number of spoiled surveys from each of the different cohorts are listed in table 3

Table 3 Actual number of respondents from different cohorts

Data set	Number interviewed	Spoiled surveys	Used responses
Employers	31	0	31
WR graduates	83	16	67
Unemployed graduates	49	14	35
Total	163	30	133

During the collection of the paper-based surveys, it was noted that many of the respondents from the work readiness cohort struggled to understand the ranking and rating questions. It was explained to the work readiness and employer cohorts in detail; how the ranking and rating questions were going to be collated and help was offered to anyone struggling with regards to how the surveys needed to be answered. Respondents were not given guidance on which responses to give but were assisted with advice on exactly how the ranking and rating scales worked. Despite this in-depth explanation, 16 responses could not be used, and these were classed as “spoiled” as per table 3.

The most common trend for spoiled surveys from the work readiness cohort was they ranked all the ranking questions with the same response, i.e. all as 5 and this resulted in the ranking question becoming void because the responses needed to be ranked 1–5. Any surveys that had not been ranked or rated appropriately were discarded, and the responses were not included in the overall results.

Due to this trend, it was expected that because the unemployed graduates were not given as much direction on how to rank and rate the questions for the online survey, many surveys could not be used. However, a different trend was observed from the online survey because after giving consent and then confirming which cohort they were part of, some respondents (14 out of 49) did not answer any further questions. This may have been because they either did

not understand how the ranking questions worked, or it was not clear enough on the online system as to how the question structure worked. It may also have been a language problem if English was not the respondent's first language.

Contact with the three different cohorts varied, with the work readiness cohort being contacted via a WhatsApp group and via SMS. Employers who confirmed attendance at the graduation event were contacted via email or telephonic conversation, whilst the unemployed graduates were contacted via email. The unemployed graduate cohort was obtained from a batch of candidates who had applied for the new intake of the work readiness programme for 2018.
All participants were asked for their permission to participate in the survey, and those attending the graduation ceremony were made aware that they would be asked to participate.

6.3 Analysis of research reports that were used to gather information for this report

Oluwajodu's (2015) report supports the findings from this report in that a lack of skills is a major contributor to the problem of graduate unemployment in South Africa. The other two major contributing factors to graduate unemployment from Oluwajodu's study were institutions that graduates attended, and differences in expectations from employers and graduates. Second, a graduate's qualifications that are not deemed as "advanced" do not have a major effect on graduates' chances of gaining employment.

The report by Oluwajodu (2015) is limited in its scope, because it specifically focused on graduates in the banking sector. Although banking is a major contributor to South Africa's economy (22% of the South African economy is from finance, real estate and business services), it is still only one sector out of many, and the results of this report cannot be said to give an overall picture of South African graduates' unemployment.

Van Der Berg's (2012) paper is a very robust report, with a great deal of analysis of previous reports and data research on graduate unemployment in

South Africa. The report does not concentrate on any specific industry and defines a graduate on the basis of their research as someone with “at least a university degree,” (Van Der Berg, 2012). In Van Der Berg’s report, it is found that “post-secondary qualifications have skills which are in oversupply,” (Van Der Berg, 2012), which supports the findings of this report that technical skills are lacking in South African graduates.

The report by Van Der Berg also supports the findings of this report that training post-graduation is sometimes necessary in order for graduates to obtain employment (i.e. a work readiness programme). However, Van Der Berg’s findings are limited because the focus of the findings are on “degree level” or higher qualifications whilst this report includes “diplomates” (Van Der Berg, 2012) which is a significant sector, in terms of numbers, of the South African employment pool.

Howie’s 2016 study relates to the preparedness of South African learners with specific regards to reading. The research was extremely robust, because many different factors were taken into account when researching the topic, namely access to books, languages in which learners are taught, teachers’ education, classroom size and parents reading ability, etc. The findings were pertinent to the results of this study because a recommendation from Howie’s study was a need for a “targeted initiative focused on Limpopo, Eastern Cape and Northern Cape,” (Howie & McLeod, 2016). Therefore, if the results of this report on graduate preparedness show that creating jobs outside the economic hubs of Gauteng is a way of alleviating unemployment, then foundation stage schooling will need to improve in these provinces in order for people to stay in those provinces.

A potential limitation of Howie’s study is that the report particularly focuses on the results of reading at lower-grade levels. Although this is an extremely important skill in a South African context, it is limited in showing how much of a lack of preparedness affects those surveyed once they leave basic education. Reading is presumed to not be the only skill that is in short supply in South Africa, and this could be perceived as the biggest barrier in Howie’s report.

Rey-Alicea's study highlights the need for sector-specific work readiness programmes, because a "one-size-fits-all model does not work," (Rey- Alicea & Scott, 2007, p.31). Rey-Alicea's study was limited to the United States and did not focus on any specific segment of the employment pool. However, it is useful because it shows that targeting a specific sector is critical to a work readiness programme being implemented effectively.

6.4. Why this approach was selected

The reason that this particular approach was selected for this report was because it is intended to provide a framework for improving the work readiness programme that has been implemented for future cohorts. The aim is to provide graduates who complete the Networx work readiness programme in the future with the best possible chance of securing employment. Consideration of previous studies was vitally important in ensuring that the data collected for this report was pertinent in finding the relevant solutions that are needed to improve the first phase of this project. It is hoped that the outcomes of this survey ensure that future programmes continuously improve and graduates (no matter what definition is used), are offered a first-class programme and an opportunity to gain employment.

6.5 Potential ways to improve research for future consultancy reports

During the review of the literature, it was apparent that in some of the research the samples used were small. This could have been for a number of reasons, but when the sample size is only 27 (as in one case), then it is relatively small when viewed as a reflection of a total population. To ensure that a sample size is significant, it would be worth trying to ensure that a sample size of 300 is the minimum number of respondents required.

A possible suggestion for future researchers – in order to ensure that the total size of the population surveyed is large enough – could be to add gamification to the research. This could be as simple as finding a sponsor of the research and offering prizes for respondents who answer the questions the quickest; or all respondents are put into a draw to potentially win something of value. During this survey, it was extremely difficult to get unemployed graduates to participate

in the survey. However, if it was possible to offer a prize that was randomly allocated, it could incentivise participation in the survey, which may have increased the sample. A potential problem could be that offering an incentive may not be ethically considerate, but it may be an avenue worth investigating.

Leveraging off the progress of big data and the internet of things (IoT) could be something that consultants look at it in order to target larger data sets. When people supply their personal data in shops, researchers could access information and build a profile of the respondents they wish to profile. As long as ethical standards were met when making respondents aware of the intended outcomes of the research, and what the research was going to be used for, then this could be used for identifying data sets.

7.0. Findings

7.1 Survey findings for individual cohorts' survey responses to question 1: Please rank the following barriers to graduates being unable to secure sustainable full-time employment in South Africa:

7.1.1 Key to questions and responses derived from questions *1*
For any questions pertaining to question 1, please find the table below that highlights which response applies to relevant abbreviations.

Table 4 Key to abbreviations for question 1

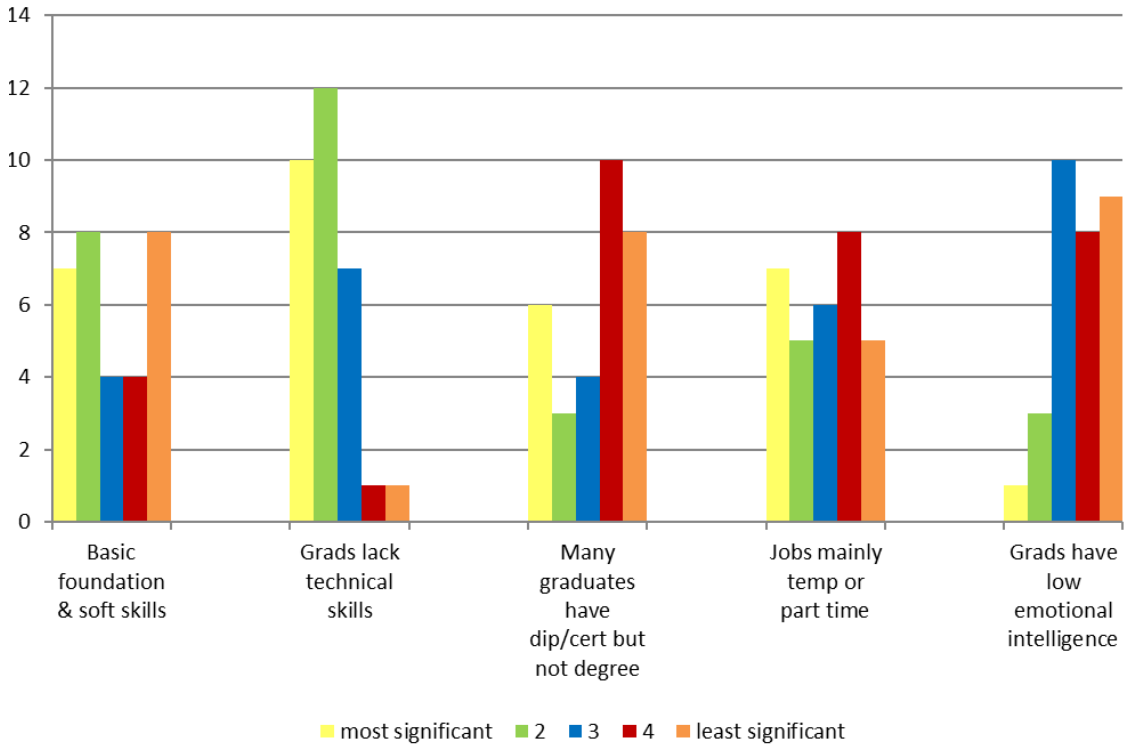
KEY TO QUESTION 1	
Response	Abbreviated term in text
Basic foundation academic competencies and soft competencies are rarely taught in lower grades	**Basic foundation & soft skills**
Graduates lack technical skills and competencies that employers are looking for	**Grads lack technical skills**
Many graduates have only obtained a diploma or certificate rather than a degree	**Many graduates have dip/cert but not a degree**
Employment opportunities for South African graduates are mainly temporary or part-time	**Jobs mainly temp or part-time**
Graduates in South Africa tend to have low emotional intelligence	**Grads have low emotional intelligence**

Please note that the responses are rated with the highest response on the left of the tables for question 1. Therefore, the most significant perceived barrier (yellow) will be the bar on the left side for each data set, and the least significant perceived barrier (orange) will be placed on the right-hand side of the graph. The corresponding colours from the most significant perceived barrier to the least significant perceived barrier, in descending order, are shown below each table.

7.1.2 Findings from employers' cohort

Figure 1 Employers' cohort results question 1

Employers Question 1



7.1.2a) The most significant perceived barrier for graduate unemployment in South Africa is graduates lack technical skills *for the employers' cohort*

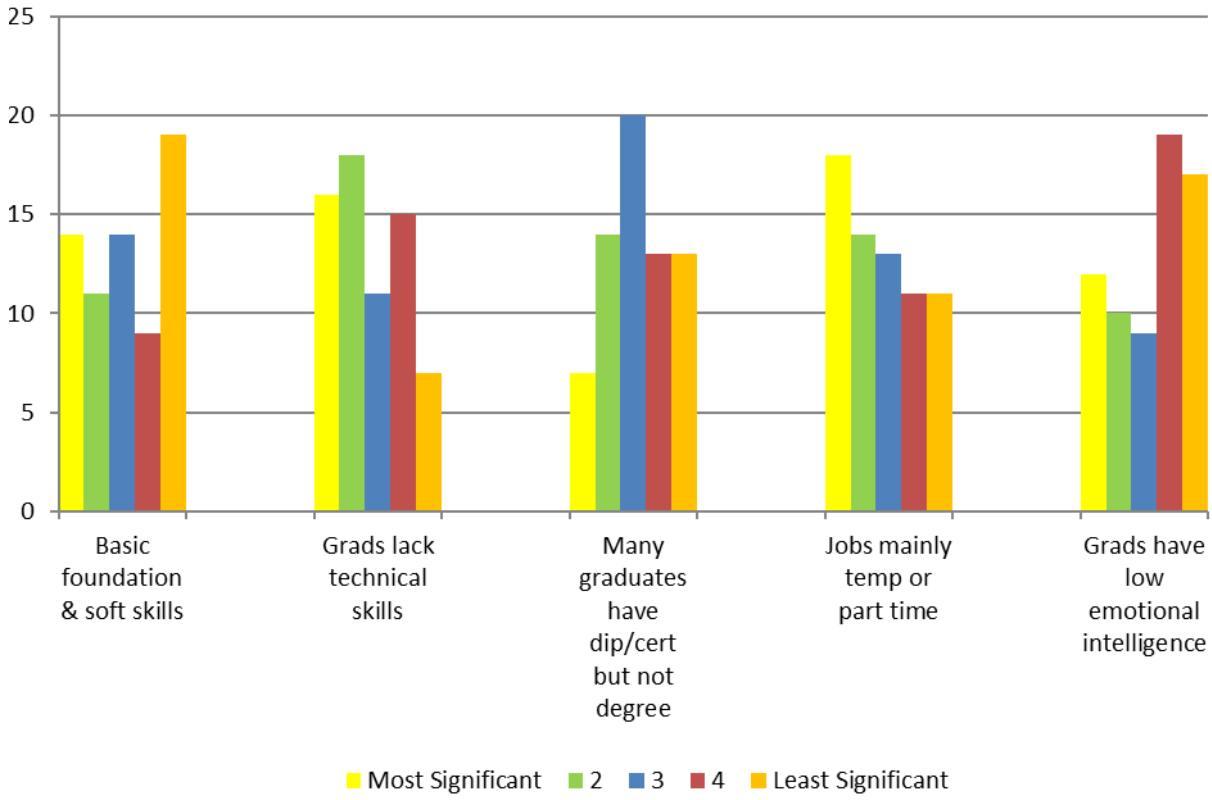
7.1.2b) Twenty-two (22) of the 31 (thirty-one) respondents ranked graduates lack of technical skills as being either the most significant or the second most significant barrier to graduate employment in South Africa.

7.1.2c) The employers' cohort rated graduates as having low emotional intelligence as the least significant barrier to graduate employment.

7.1.3 Findings from work readiness cohort

Figure 2 Work readiness cohort results question 1

Work readiness cohort Question 1



7.1.3a) Jobs being mainly temporary or part-time were ranked as the most significant barrier for graduates finding employment.

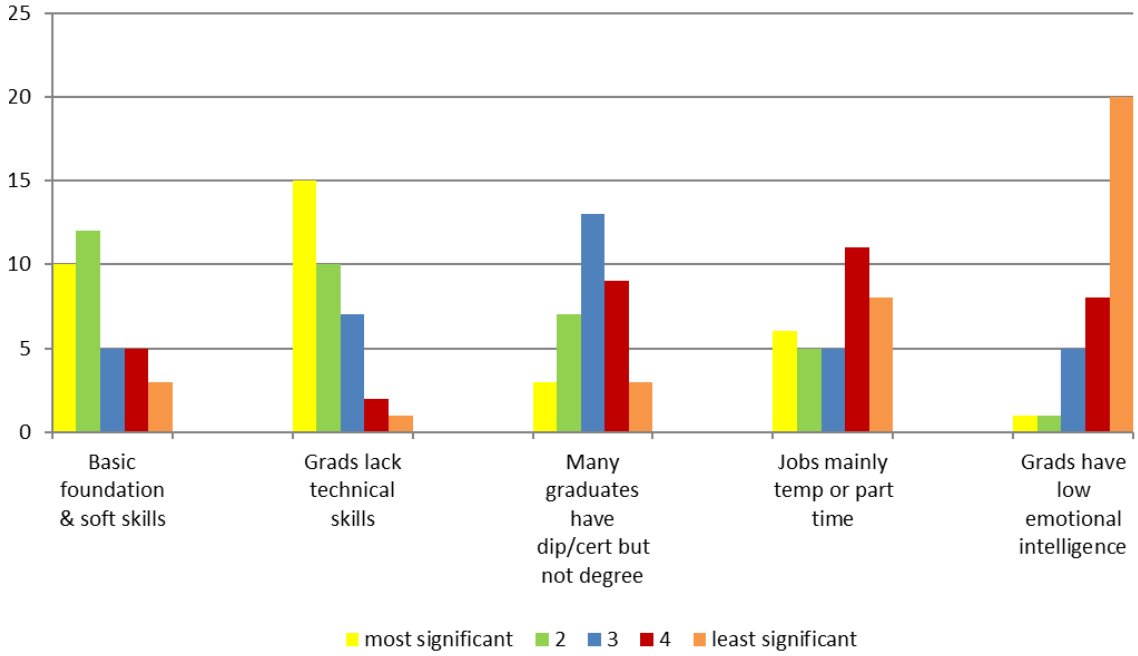
7.1.3b) The difference between jobs being temporary or part-time (as the most significant perceived barrier) and graduates lack of technical skills (being perceived as the second most significant perceived barrier) is very hard to ascertain from the graph and only by comparing the mean average can the two responses be differentiated.

7.1.3c) Graduates with low emotional intelligence are ranked as the least significant perceived barrier to graduates obtaining employment by the work readiness cohort.

7.1.4 Findings from unemployed cohort

Figure 3 Unemployed cohort results question 1

Unemployed cohort Question 1



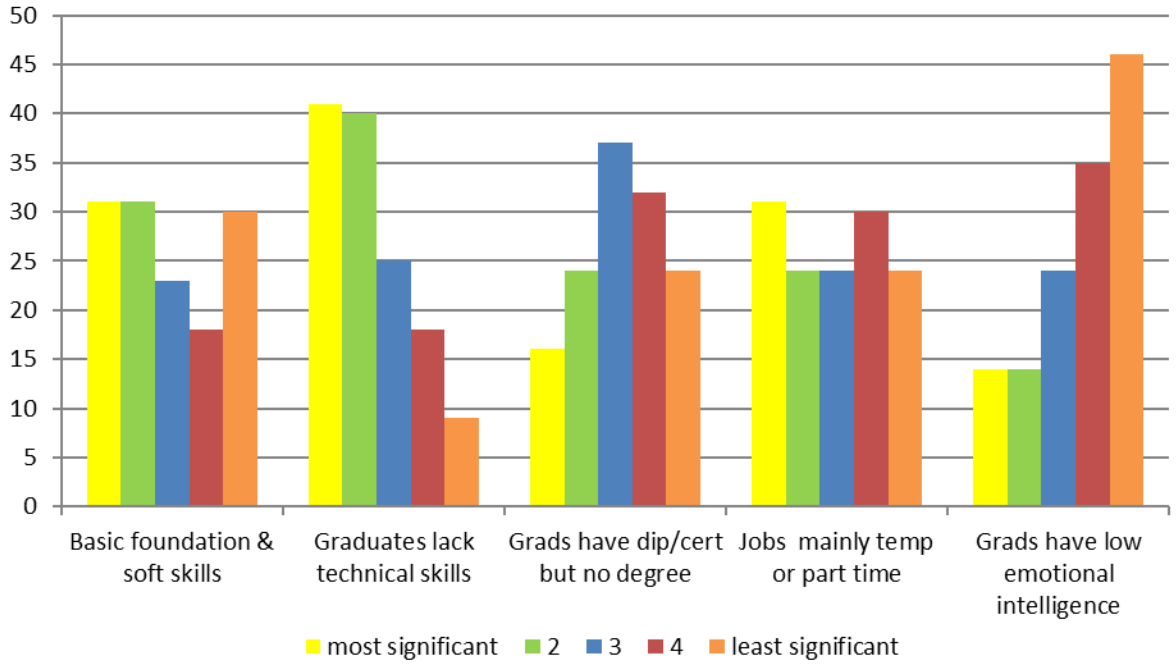
7.1.4a) Graduates lacking technical skills were ranked as the most significant barrier to graduate unemployment.

7.1.4b) Graduates with low emotional intelligence were ranked as the least significant barrier to graduate employment.

7.1.5 Results for Question 1 – all cohorts combined

Figure 4 Combined cohorts results question 1

Combined cohort responses Question 1



7.1.5a) The table of results shows that the most significant perceived barrier to graduates being able to secure sustainable employment is graduates' lack of technical skills.

7.1.5b) Graduates with low emotional intelligence are ranked as the least significant barrier to graduate employment.

7.1.6 Most significant perceived barrier

The most significant perceived barrier to graduate employment is graduates' lack of the technical skills and competencies that employers are looking for.

7.1.6a) Graduates' lack of technical skills had the largest number of respondents as the most significant barrier (41).

7.1.6b) Graduates' lack of technical skills had the largest number of responses as the second most significant barrier to finding employment (40).

7.1.6c) Graduates' lack of technical skills received the fewest number of responses, and was rated as "least significant" (9).

7.1.7 Least significant perceived barrier

Graduates with low emotional intelligence received the highest number of respondents ranking it as the least significant barrier (46).

7.1.7a) Graduates with low emotional intelligence were ranked as the least significant barrier to graduates gaining employment.

7.2 Survey findings for individual cohort's survey responses to question 2: *Please rate the expected effectiveness of the following measures to alleviate unemployment in the South African graduate sector:*

Table 4 Key to abbreviations for question 2

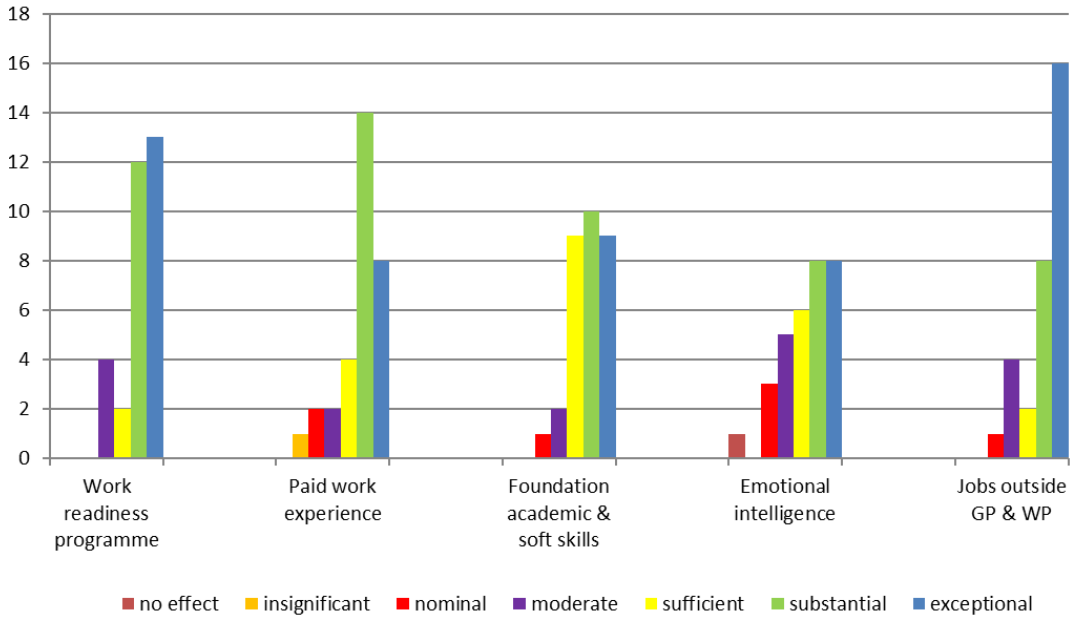
KEY TO QUESTION 2	
Response	Abbreviated term in text
A work readiness programme for all South African graduates	**Work readiness programme**
A paid work experience programme prior to gaining a full-time job	**Paid work experience**
Improved teaching of academic and soft skills at foundation phase schooling	**Foundation academic & soft skills**
Promotion of emotional intelligence at tertiary level institutions	**Emotional intelligence**
The creation of more job opportunities for South African graduates outside of the traditional economic hubs of Gauteng and Western Cape	**Jobs outside GP & WP**

Please note that the responses are rated with the highest response (blue) on the right side of the tables in question 2 (which is opposite to question 1). Therefore the most effective measure of alleviating unemployment will be on the right-hand side of the graph (exceptional) for question 2.

7.2.1 Findings from Employers' Cohort-

Figure 5 Employers' cohort results question 2

Employers'



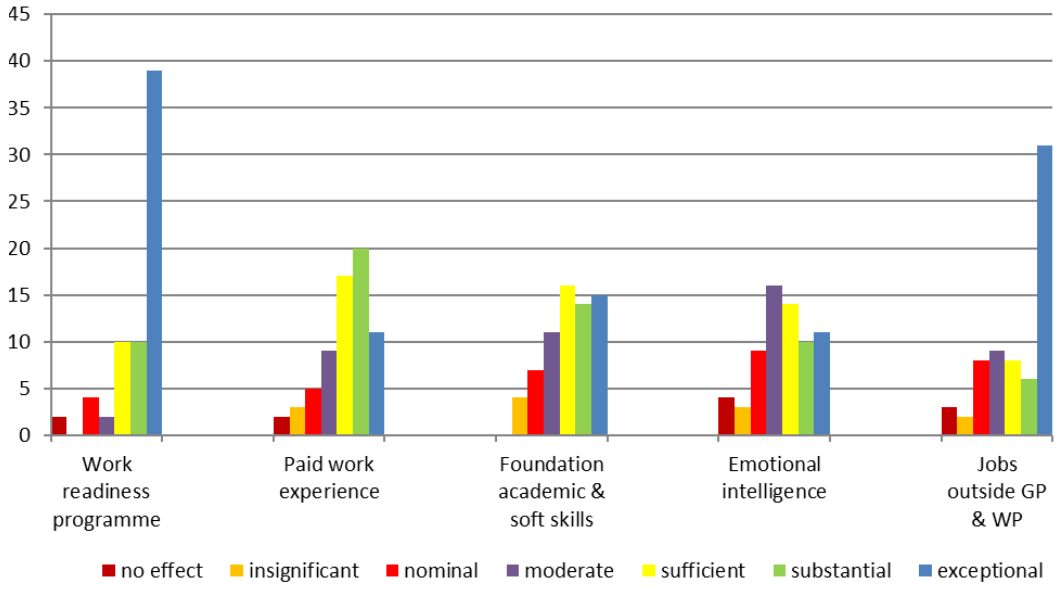
7.2.1a) Creating jobs outside Gauteng and Western Cape were rated as the most effective measure for alleviating graduate unemployment in South Africa.

7.2.1b) Promotion of emotional intelligence at tertiary level was rated as the least effective measure to alleviate graduate unemployment.

7.2.2 Findings from work readiness cohort

Figure 6 Work readiness cohort results question 2

Work readiness Question 2



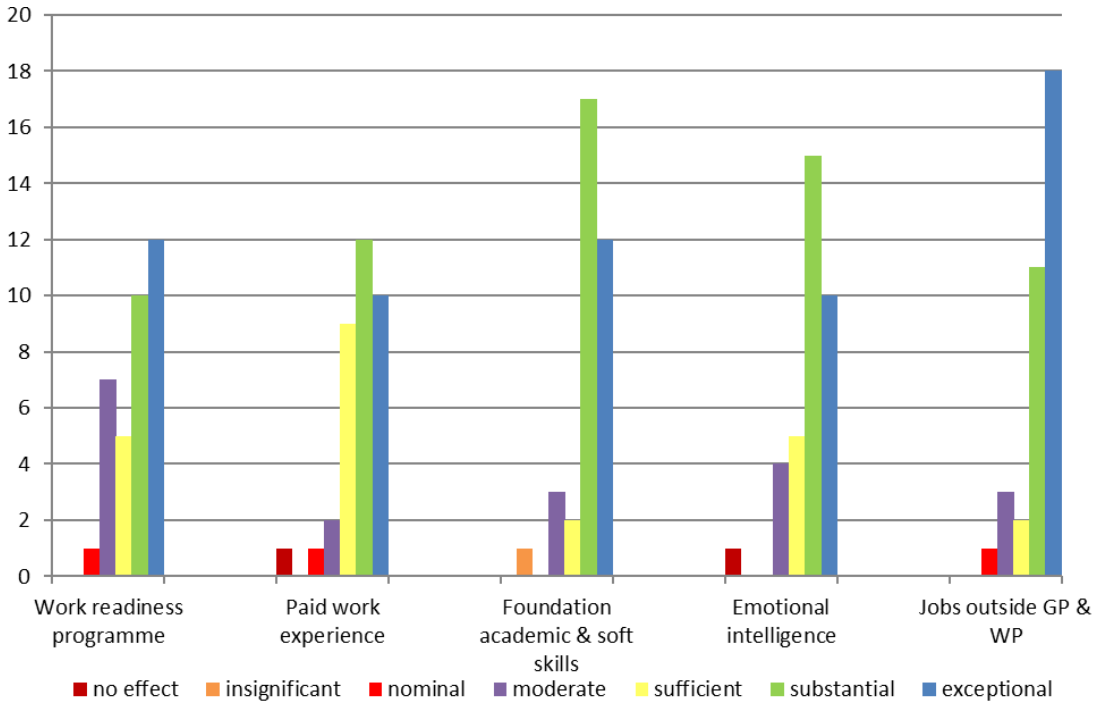
7.2.2a) The introduction of a work readiness programme for all South African graduates was rated as the most effective measure for alleviating graduate unemployment in South Africa.

7.2.2b) Promotion of emotional intelligence at tertiary level was rated as the least effective measure to alleviate graduate unemployment.

7.2.3 Findings from unemployed cohort

Figure 7 Unemployed cohorts results question 2

Unemployed Question 2



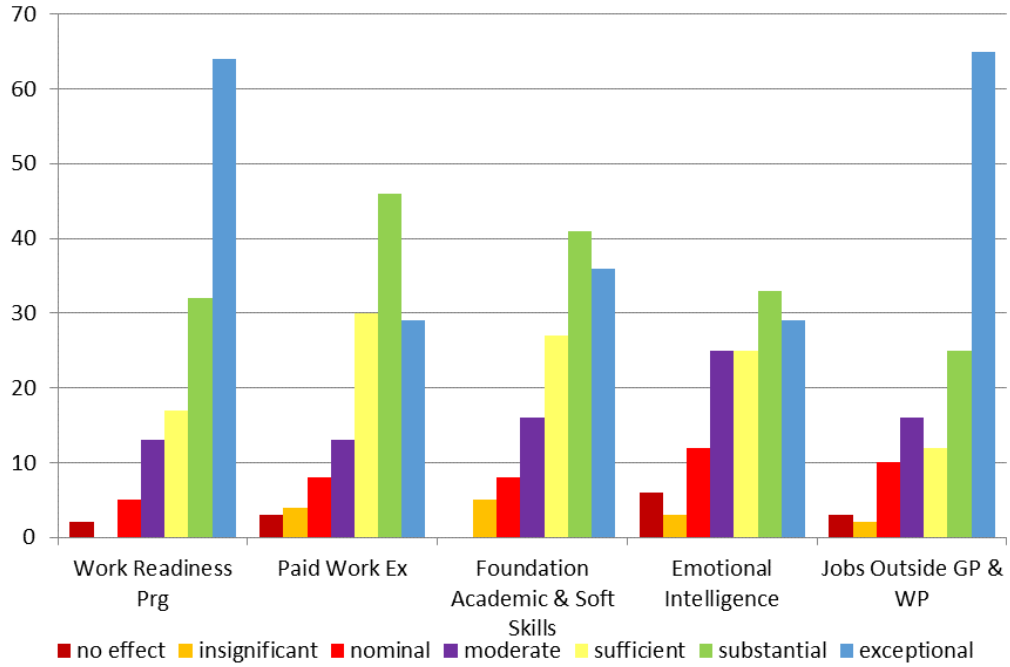
7.2.3a) Creating jobs outside Gauteng and Western Cape were rated as the most effective measure for alleviating graduate unemployment in South Africa.

7.2.3b) A paid work experience programme prior to gaining full-time employment was rated as the least effective measure for alleviating graduate unemployment.

7.2.4 Results for question 2 all cohorts combined

Figure 8 Combined cohort results question 2

Combined cohort Question 2



7.2.4a) The results from the combined cohort show that the creation of a work readiness programme for all South African graduates was rated as the most effective measure for alleviating graduate unemployment.

7.2.4b) The results from the combined cohort show that the creation of jobs outside the economic hubs of Gauteng and Western Cape were rated as the second most effective measure of alleviating graduate unemployment in South Africa.

7.2.4c) Promotion of emotional intelligence at tertiary level institutions was rated as the least effective way of alleviating graduate unemployment in South Africa.

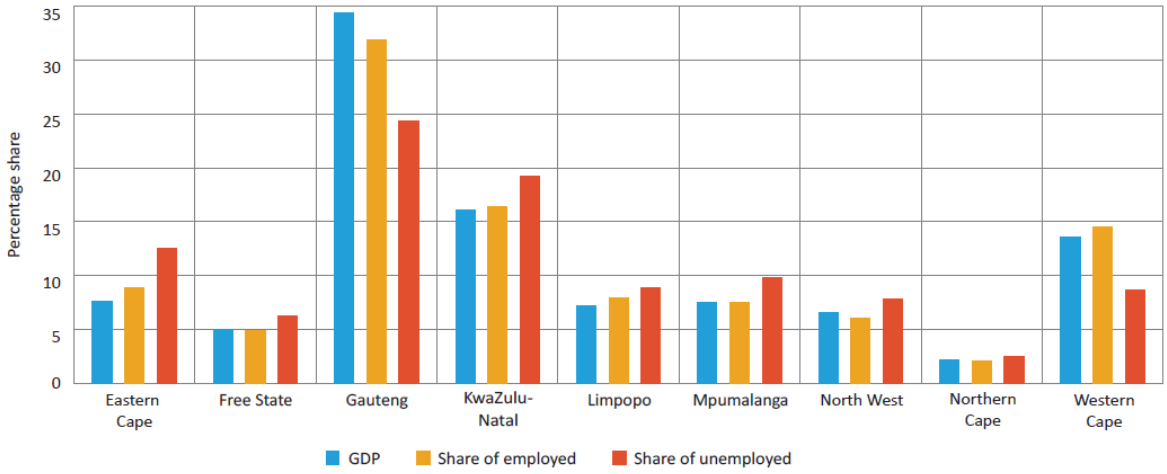
8.0 Areas that require further research

The combined results for all cohorts for this report show that the creation of a work readiness programme was viewed as the most effective way of alleviating graduate unemployment in South Africa. However, the results were mainly driven by the results from the work readiness cohort, which was the largest sample size (67). Both the employers' (31) and unemployed cohorts (35) rated the creation of jobs outside the traditional economic hubs of Gauteng and Western Cape as the most effective way of alleviating graduate unemployment, so it would be prudent to further research to see whether similar-sized sample groups' results would show the same conclusion or not.

That being said, the creation of a work readiness programme for all South African graduates was shown by respondents to be the most effective way of alleviating graduate unemployment. Therefore, in light of Rey-Alicea's findings – with regards the need to have sector-specific work readiness programmes – further research needs to be carried out to ascertain exactly what the specific sectors are and/or if a generic work readiness programme could be developed with different modules added for individual sectors.

From the findings of this study the need to understand exactly which model a South African work readiness programme should look like arose. This should be researched as a matter of priority for Networx, government and industry.

Figure 9 Provincial GDP figures 2014



Provincial GDP figures from 2014 page 35 (Visser, 2014)

If we wanted to carry out research on the feasibility of introducing greater numbers of Industrial Development Zones, as good place to begin would be to combine the results of this survey with the Figure 9 (above) statistics.

KZN (2) Richards Bay and Dube Tradeport

Gauteng (1) OR Tambo IDZ

Eastern Cape (2) East London and Coega IDZ

Western Cape (1) Saldanha Bay

Free State (1) Maluti-a-Phofung

Only two of these IDZs are located in provinces where the GDP accounts for less than 8% (eight per cent) of South Africa's total. Research should be undertaken to ascertain the effect of creating IDZs in the other provinces and what the potential positive outcomes of these IDZs would be on the overall prospects of South African graduates seeking employment.

Further research needs to be undertaken to ascertain which specific skills employers are looking for, as the research does not specify which skills employers are looking for. Oluwajodu, Van Der Berg and the Confederation of

British Industry all support the findings of this report, in that skills are critical for graduates who wish to find employment. If there is a skills gap in South Africa, then research must be carried out on exactly which skills are desired, and a skills plan needs to be aggressively implemented. Van Der Berg's report does state that the skills needed are "technical skills", but stops short of actually stipulating what the technical skills are. Therefore, further research needs to be conducted on which skills are needed from South African industry.

9.0 Tools used to ensure the validity of results

In order to ascertain the validity of the results that have been detailed in this report, different techniques were used in order to substantiate the findings. The results of these surveys were initially collated into an Excel spreadsheet and then converted into charts, which have been copied into this report (figures 1–9). Thereafter the graphs charts were analysed by 10 (ten)] different people to ensure that the results from the charts were agreed upon by those 10 who initially viewed the charts. This tool is very crude because it was intended to ensure that visual results had been confirmed by a number of people without them having any prior knowledge of any numbers or statistics. In the cases whereby clear results could be ascertained visually, the results were validated via the statistical technique below. Where a result was not clear from the charts then the statistical technique was again applied to ascertain the results.

Statistical graphs were derived from the mean average (μ), which was used to substantiate the results derived from the bar charts.

The mean average chart shows how each response ranks when compared against the other responses. The responses are therefore weighted and each graph shows where each response is ranked in comparison to the other responses relating to the average. The response that is the highest in comparison to the average can be used to substantiate which response is rated or ranked as the highest or lowest in relation to the average. The statistical analysis was carried out per cohort for questions one and two, and then separately for all the cohorts combined. Therefore, the results can clearly show

which barrier was ranked as the most significant and which was least significant from all cohorts, as well as the combined cohort view.

By applying all the techniques, the results were validated by using the different techniques and could be relied upon for accuracy so that a management team could clearly see the results from the survey.

10.0 Potential cost benefits for the South African labour market

Recruiting the correct candidate for a position can cost as much as R55 819 (Graduate recruitment bureau, 2018) and thus, purely from an employers' point of view, the cost implications are extensive. When taking into consideration the lengthy process to recruit a graduate and the time invested in a graduate once they are hired, then the cost attributed to hiring the wrong graduate can be as high as R204 000 (Robinson, 2018). The reasons graduates do not succeed in a company are numerous as, "graduates may not possess the skills, work ethic or motivation," (Robinson, 2018). Therefore, by implementing a funded work readiness programme, employers will be able to see if a graduate is a correct fit during the six-month programme, and it will assist in identifying whether the graduates have the correct skills, competencies and attitude to become successful in the job that the company requires.

By accessing a work readiness programme, employers will be able to use the programme as a viable onboarding strategy for graduates. It would create a win-win scenario for both the graduates and the employers, because even if the graduate does not get absorbed, they will have crucial experience, and if they have performed, will also have a reference for future employers to contact. An employer will benefit because they will be able to build an emotional contract with the graduate during the work portion of the programme, and will be able to ascertain if the graduate is of a high enough calibre and a correct culture fit.

Another cost benefit from a cost socio-economic perspective is that the graduate will not be a financial or emotional drain on their immediate family. As the literature review concluded, the emotional trauma of being unemployed goes beyond just the graduate, and also affects family and community

members. Creating a viable route for employment that also provides a source of income for the graduate, and the opportunity to become permanently employed, is something that cannot be taken lightly because graduates need their emotional needs to be fulfilled. The costs benefits go beyond a financial one and will benefit the graduate emotionally as well.

11.0 Overall results from research from cohorts

From the results of this research report the most significant perceived barrier to graduates being able to secure sustainable full-time employment in South Africa is;

11.1 Graduates lack technical skills and competencies that employers require

From the results, the most effective means of alleviating graduate unemployment in the South African graduate sector are:

11.1a) A work readiness programme for all South African graduates. This is perceived as the most effective measure for alleviating unemployment in the South African graduate sector.

11.1b) The creation of more job opportunities for South African graduates outside the traditional economic hubs of Gauteng and the Western Cape.

A point that is critical to note is that all responses to both questions received a relatively mixed number of responses that were at the higher end of both ranking and rating questions, but also received responses that were at the lower end of the ranking and responses also. An example would be where graduates have low emotional intelligence ranked as the lowest barrier to graduates obtaining employment, but the response still achieved some responses rating as the most significant barrier to employment. Similarly, with the response rated as the most significant barrier to graduates finding employment (graduates' lack of technical skills), the response still received responses rating it as the lowest perceived barrier to graduates obtaining employment.

No doubt this trend occurs in all research that is carried out, but it is still worth highlighting that all responses had a degree of merit attached to them by certain respondents. Therefore, no response should be totally discounted for further research or for potentially adding value in some way to solving graduate unemployment.

From a Networx perspective, the foundation stage of the graduate's life has passed so they can do nothing to change this during their programmes. Enhancing the graduate's understanding of what emotional intelligence is could still be an important consideration, and should not be dismissed just because emotional intelligence received such low responses; instead Networx should immediately concentrate on the responses that gained higher ratings to improve their programme.

12.0 Recommendations for further academic research

Something that is not clear from the results of this report is exactly which are the required skills and competencies needed by employers. Further academic research is required to establish the nature of the skills required by South African employers, so that any skills gap can be closed and jobs can, therefore, be filled by South African graduates seeking employment.

Although the findings show that the creation of a work readiness programme for South African graduates is viewed as the most effective means of alleviating graduate unemployment, Rey-Alicea's (2007) study needs to be acknowledged for its findings of having targeted work readiness programmes. Further academic research needs to be carried out to ascertain which specific skills are required to be fulfilled for different industry sectors. If industry-specific needs can be identified, then tailor-made work readiness programme solutions can be created to further a graduate's chances of obtaining employment.

Two of the data sets (employers' and the work readiness cohort) had taken part in a work readiness programme and were surveyed at the graduation ceremony for that specific programme. Therefore, results from these cohorts could potentially be viewed as biased because graduates could have thought the survey (although anonymous) might have had some bearing on their graduation or (if still unemployed) their chances of securing future employment. A further study should be carried out on another test group of similar cohorts to see if the results are different from the results of this study. Similarly, a further study should be carried out on another cohort of unemployed graduates to see if the overall results of this study were not impaired due to respondents potentially being biased.

Creating jobs outside the traditional economic hubs of Gauteng was viewed as a highly effective measure of alleviating graduate unemployment, and this would require further academic research to ascertain which provinces have the infrastructure to create viable employment opportunities. Different stakeholders

would need to be included in any further research because capital outlay, as well as industry and government support, would need to be considered.

13.0 Recommendations to Networx for career development

- Networx needs to promote the success of the 2017 work readiness programme to other sector education training authorities (SETAs)
    - At present the programme is only funded by the transport sector education training authority and with more funding more opportunities can be created.
- Networx needs to take cognisance of the findings of this report to immediately improve their next work readiness programme.
- The socio-economic development portion of the Broad-Based Black Economic Empowerment (B-BBEE) codes specifically earmark corporate funds for initiatives of this sort.
    - Corporates need to be approached to be made aware of the success of the 2017 programme, so more funds can be made available for this successful programme.
- The recently launched ‘YES’ (Youth Employment Service) should be approached about the success of the 2017 project, because association with a government-endorsed initiative will add credibility to the Networx brand.
- Networx must leverage its association with the Tshepo 1 Million initiative so that industry is aware of the validity and success of the programme.
- A model that also attempts to bridge the skills gap between industry and graduates should be researched and potentially implemented by Networx.
- Different models for sectors of unemployment need to be researched and implemented by Networx as recommended by the Rey-Alicea (2007) report.
    - Graduates need not be the only sector recipients of such a successful programme and other models should be explored that can reduce the burden of unemployment.

- Networx simulation component is clearly a differentiator in the work readiness space and adds extreme value to the programme.
    - Approaching both industry and government needs to be explored, as well as the marketing of this differentiator.

14.0 Conclusion

The 2017 work readiness intervention conducted by Networx for career development was undoubtedly a success in achieving a 68% absorption rate. The challenge now is to improve the programme and ensure that the message of success is communicated to a much broader audience, whilst remaining cautious about trying to grow the programme too big, too fast. By growing too fast, it could create a model that cannot deliver on Networx's vision of alleviating graduate unemployment, because the model (although tested and successful) is still in its inception stage. The CEO of Networx is known for her cautious (yet ambitious) approach in adding value to the South African community development environment, and conceptualising initiatives of this kind.

More interventions are needed like the Networx for career development work readiness programme, in order to attempt to resolve the issue of unemployment in South Africa. Both government and industry need to be made aware of the success of the programme and funds need to be channelled towards this successful model of creating employment.

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