

# Graduate Employability: Conceptualisation and findings from the University of South Africa

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## Abstract

A major motivation for students of all ages to enter tertiary education is to improve their access to the job market and increase the likelihood of success in their career trajectories (McCune, Hounsell, Christie, Cree, and Tett 2010). This is particularly relevant in the South African context, which unfortunately claims an unemployment rate of 25 per cent (Statistics South Africa 2013). Universities therefore have to balance their broader purpose of producing well-rounded citizens with meeting the demands of the labour market.

The University of South Africa (Unisa) is an Open Distance Learning (ODL) institution with more than 320 000 students (Unisa2012). Unisa sees employability as an indicator of student success and the institution's ability to provide qualifications that are appropriate for the ever-changing demands of the globalised knowledge economy. This article reports on the 2011 graduate exit survey, focussing on the employability and graduate attributes of the 2009 graduates. Whilst this article focusses on employability of Unisa students, it also provides insight into how the complex phenomenon of graduate employability can be studied in the broader global ODL environment. The conceptual framework developed for this study and discussed later is applicable to both local and global higher education contexts. The data provides insight into the black box of student employability and student needs for support to increase their employability.

**Keywords:** Employability, graduateness, career management, transferrable skills, work experience, orientation to the job market

## INTRODUCTION

In recent years, the global higher education environment and labour market have been characterised by an increasing preoccupation with the concept of graduateness. The impetus has been a greater understanding of the role

that higher education can play in contributing to the new knowledge-based economy, which needs to be driven by highly skilled, competent and flexible individuals. Universities are increasingly responsible for producing employable graduates to contribute significantly to a knowledge-driven economy. However, this responsibility is not without its challenges. The disconnect between what universities produce and what employers want is problematic, with universities under increasing pressure to close the gap. Conversely, criticisms levelled against the notion of universities merely producing graduates for the workplace are also commonplace. While higher education does serve a broader purpose of producing well-rounded citizens, some argue that it also has a role in meeting the demands of the labour market. It is also evident from literature that employability remains an inevitable component of graduateness (Chetty 2012).

Importantly, a major motivation for entering tertiary education for students of all ages is access to the job market and to improve their career trajectories (McCune et al. 2010). Within the South African context, the value of a tertiary qualification in attaining employment is illustrated in the unemployment rate according to level of education. For graduates of higher education institutions, the unemployment rate is 12.5 per cent, half the unemployment rate (25%) of those South Africans that have completed only secondary schooling (National Income Dynamics Study 2008).

The University of South Africa's (Unisa's) commitment to nurturing its student body and providing the best possible student support to promote well-being and increase retention and throughput, is given expression in its strategic objectives (Unisan.d.). The Graduate Exit Survey formed part of the suite of student-focused instruments at Unisa and specifically targeted students who completed the final step in the student walk, namely graduation. It aimed to contribute to the institutional knowledge base on the Unisa student body by exploring the pathways of Unisa graduandi. As Albertyn, Kapp and Blitzer (2008) explain, the graduate exit survey is an important tool for higher education institutions to ensure that the institution provides qualifications appropriate for the ever-changing demands of the globalised knowledge economy.

## RESEARCH CONTEXT AND AIMS

Unisa is an Open Distance Learning (ODL) mega-university in the developing country context of South Africa. Unisa provides flexible and cost-effective access to a wide range of academic, professional and vocational programmes for a predominantly non-traditional, part-time, older student population of more than 320 000 (Unisa 2012). Unisa sees employability as an indicator of student

success. In addition, the employability of students is considered an indicator of the institution's ability to provide qualifications that are appropriate for the ever-changing demands of the globalised knowledge economy.

The student success and support frameworks at Unisa emphasise that increased knowledge of student experiences and life circumstances is essential to inform Unisa's efforts to increase student success and satisfaction (Subotzky and Prinsloo 2011). In 2011, the first Unisa Graduate Exit survey was undertaken to examine the employability of Unisa graduates, as well as how a Unisa education and qualification contributes to employability. The Graduate Exit Survey, with its focus on academic and non-academic variables, agency and fit, is located within this broader emerging student success and learner support framework.

As mentioned earlier, the gap between what graduates possess (knowledge, skills and attributes) and expectations of the workplace is problematic – and this is well documented in literature on graduateness (Tynjälä, Välimaa and Boulton-Lewis 2006). This disconnect is generally explored through employer surveys. This research study, however, had the following aims:

1. To explore the appropriateness and relevance of their qualifications for employment from the perspective of graduates.
2. To explore the dimensions of graduate employability.

The conceptual framework that formed the basis of this study and informed the design of the instrument is illustrated in the following section.

## **CONCEPTUAL FRAMEWORK FOR GRADUATE EMPLOYABILITY**

This conceptual framework (see Figure 1) aims to show the various factors influencing graduate employability<sup>1</sup> and how employability, in turn, influences interaction with the labour market to ultimately impact employment outcomes. The definition of employability has matured over the last several decades. Originally the focus was on preparing graduates for employment, however, this focus has since shifted to a more holistic view of employability as a part of graduateness (Knight and Yorke 2004). This shift mirrors the changes in the labour market where students are no longer employed in one job for life, but are expected to be adaptable in order to deal with the ever-changing modern work environment and its requirements, including emerging technologies (Bridgstock 2009; Glover, Law and Youngman 2002). Initially, employability research focused on skills and dispositions which would increase the chances of employment of graduates

(Fallows and Steven 2000). However, more holistic views have since emerged considering the subjective dimensions such as personal disposition, attitudes and identity and how these influence employability (Tomlinson 2007).

For this conceptual framework, the USEM model (Knight and Yorke 2003; Yorke 2006) will be used:

- U: Deep *Understanding* grounded in a disciplinary base – specialised expertise in the field of knowledge
- S: *Skilful* practice – communication, management of time, self and resources, problem-solving and lifelong learning
- E: *Efficacious* beliefs about personal identity, self-worth and personal qualities – the extent to which a student feels that he/she is able to make a difference
- M: *Metacognition* – self-awareness about learning and the capacity to reflect on, in and for action

The various lists of skills previously used in employability literature can be subsumed under these four categories. In this framework, employability is seen as situated within the graduate.

There are three major stakeholders in graduate employability: the Higher Education Institution (HEI), the graduate and the employer (represented as part of the labour market in the conceptual framework) (Yorke 2006; Cox and King 2006). The HEIs provide academic input as well as support services (academic, operational and social). The institution also has a social context with exposure to other students as well as a particular institutional culture and set of practices (Unisa 2011). The HEI interacts with the student to develop graduateness. The students introduce their own backgrounds as well as current socio-economic statuses and life circumstances to the transaction (Unisa 2011). The students also contribute their own pre-existing psychological attributes and outcomes, along with academic readiness and ability, as well as meta-cognitive skills, to the development of graduateness (Unisa 2011).

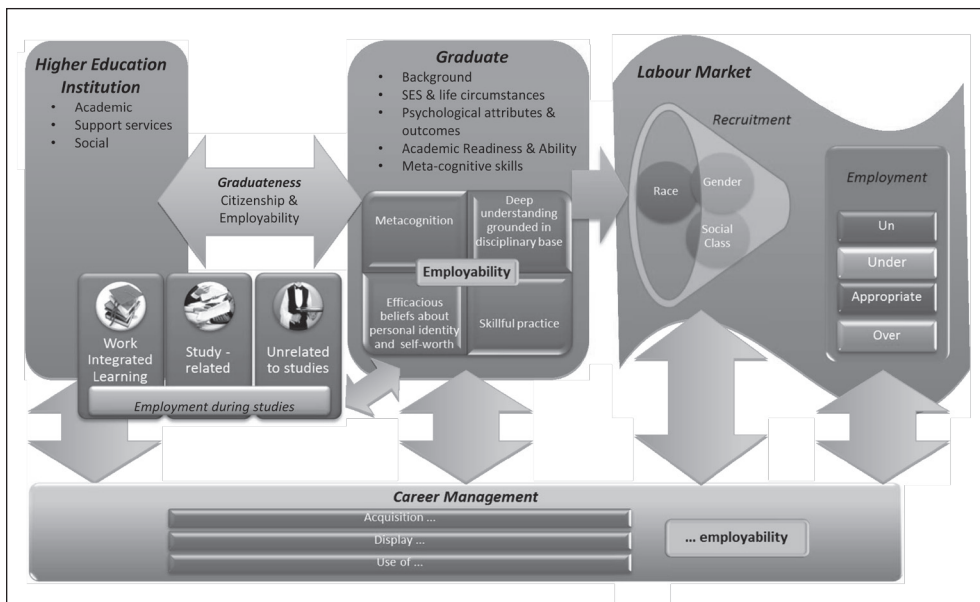


Figure 1: Conceptual Framework for Graduate Employability

Graduateness can be defined as a range of key skills and attributes developed during graduate studies and which help establish a student’s citizenship and employability (Bridgstock 2009). Unisa has been concerned with the issue of ‘graduateness’, that is the extent to which the attributes of its graduates meet the requirements of the workplace and society in general (Unisa 2010). To this end, a statement on graduateness was recently approved by Senate:

Unisa graduates have, as a result of the successful completion of their studies in an ODL context, unique qualities. These qualities are included in the following statement on graduateness.

Unisa graduates:

- i. are independent, resilient, responsible and caring citizens who are able to fulfil and serve in multiple roles in their immediate and future local, national and global communities
- ii. have a critical understanding of their location on the African continent with its histories, challenges and potential in relation to globally diverse contexts
- iii. are able to critically analyse and evaluate the credibility and usefulness

of information and data from multiple sources in a globalised world with its ever-increasing information and data flows and competing worldviews

- iv. know how to apply their discipline-specific knowledges competently, ethically and creatively to solve real-life problems and are critically aware of their own learning and developmental needs and future potential. (Unisa 2010, 14-15)

Graduateness is therefore seen as a suite of attributes acquired during study at an HEI and includes employability.

The common phenomenon of employment during studies also contributes to the development of employability (Harvey, Locke and Alistair 2002). Three types of employment can be differentiated, namely Work Integrated Learning (WIL) which is arranged by the HEI as part of the coursework, study-related work experience arranged by the student, and work unrelated to studies (Andrews and Higson 2008; Cox and King 2006). All three types of work experience during studies are seen as contributing to employability by both students (Glover, Law and Youngman 2002) and employers (Sagi 2009), although WIL and study-related work are seen as more beneficial than unrelated employment (Harvey 2005).

Although employability provides the necessary conditions for gaining employment, it is probabilistic and may not convert into employment (Harvey 2005; Yorke 2006). The graduate enters the labour market to compete for employment. Recruitment practices are uneven and strongly influenced by factors such as race, gender, social class and disability (Tomlinson 2007; Bridgstock 2009). Skills in certain fields are also more sought after than others (Tomlinson 2007; Bridgstock 2009). With the growing pool of graduates, academic proficiency has become only the first tick mark in the recruitment process (Yorke 2006). The emphasis has moved beyond the prerequisite of appropriate qualifications (which are seen as a given) to focus on finding graduates who can immediately adapt to the workplace and start being productive (Tomlinson 2007; Bridgstock 2009). This interaction with the labour market then translates into either unemployment, underemployment (the demands of the work is lower than the graduate's qualification), appropriate-level employment or overemployment (the graduate does not have the level of qualification usually required for this type of employment) (Nabi 2003; García-Aracil and Van der Velden 2008). Both overemployment and underemployment are associated with lower job satisfaction. In addition, underemployment also often leads to a loss of skills

that are not practised and to decreased future employability (García-Aracil and Van der Velden 2008).

The entire graduate walk, from initial interaction with the HEI to attaining employment and performing and moving within employment, is scaffolded by the process of career management. Career management pertains to the acquisition, display and use of employability (Bridgstock 2009). Career management involves actively building a career and intentionally managing interactions between work, learning and other aspects of the individual's life throughout the lifespan (Bridgstock 2009). Tomlinson (2007) notes that students seem to be increasingly active in managing and negotiating their careers. Career management is a continuous process. Even while studying, effective career management can be beneficial for academic performance, as an awareness of career goals can guide decisions and supports the ability to determine the relevance of the academic offering, thereby contextualising learning (McIlveen 2010). Career management therefore directly supports the acquisition of employability, which influences the attainment of employment, even during studies. The career services and career support provided by the HEI can also directly contribute to the career management skill of the graduate (Harvey 2005). Career management is most directly exhibited through the employment search approach used by the graduate to interact with the labour market to obtain employment. Career management does not, however, cease with employment, but continues to play a role in determining the career trajectory and career navigation of the graduate (Bridgstock 2009).

### **Analytic focus and research questions**

Clearly, graduate employability is a wider concept and includes aspects such as the quality and relevance of the qualification, graduateness, career management approach and attitudes and orientations to the job market. If there is a fit between employability and the demands of the labour market, this may result in employment. The Graduate Exit Survey focused on this wider definition of employability and addressed the two research aims through the following key research questions:

- ***Aim 1:*** To explore the appropriateness and relevance of their qualifications for employment from the perspective of graduates.
  - How does a Unisa qualification contribute to students' ability to meet the demands of the workplace?
  - How does the broader student experience at Unisa facilitate students' transition from a university environment into the workplace?

- **Aim 2:** To explore the dimensions of graduate employability.
  - How does completing a qualification at Unisa contribute to students' employability and career advancement?
  - What are Unisa students' attitudes and approaches to the workplace and career advancement which shape their employment and employability?
  - What are the employment pathways of Unisa graduates?

## RESEARCH APPROACH

A quantitative methodology framed the research. A survey design was employed to gather the exit information from both undergraduate and postgraduate graduandi of Unisa.

### Sampling

The database of 2009 Unisa graduates, obtained from Alumni Relations at Unisa, constituted the sampling frame for this study. The sampling approach was therefore purposive, specifically targeting the 2009 cohort. The comparison of the characteristics between the sample and 2009 graduate population are shown in Figure 2. The distribution for the sample and population follow similar trends. However, in terms of race, African graduates are somewhat under-represented, while white graduates are somewhat over-represented. Both Afrikaans and English home languages are somewhat over-represented, compared to other language groups. The age distribution is fairly similar for the sample and population, although the age group 20–29 is slightly over-represented in the sample. Although more females (58%) than male graduates responded, females were still under-represented in the sample.



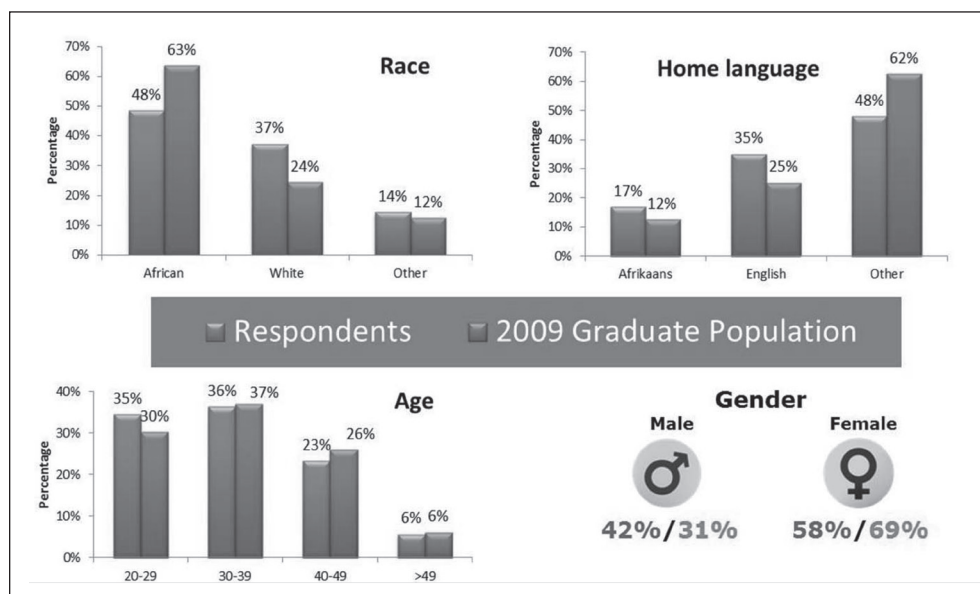


Figure 2: Unisa 2009 Graduate population compared to the sample

There were some 22 675 graduates reported for statutory purposes in 2009, however, the Alumni Office viewed the contact information of only 1 273 of the graduates as up to date and accurate. This meant that over 20 000 graduates for 2009 were deemed inaccessible. This had an adverse effect on the response rate. If the response rate were to be calculated in terms of all 2009 graduates, it would translate into a three per cent response rate. However, in terms of the accessible 2009 graduate population, the response rate achieved was 51 per cent (see Table 1).

Table 1: Response rate

	Number	Response rate
Responses	650	N/A
2009 Graduates	22 675	3%
Accessible 2009 Graduates	1 273	51%

### Instrument design

External validity, which looks at the representativeness and generalisability of the survey results (Cooper andSchindler2003), was largely addressed by the sampling process as discussed in the previous section. Internal validity, on the other hand,

focused on the survey instrument and what it was supposed to measure (Cooper and Schindler 2003) given the research objectives. The development of the exit instrument was guided by literature, the conceptual framework and examples of best-practice in the national and international institutional research community. This contributed towards construct validity. The research instrument was designed to examine each component in the conceptual framework for graduate employability as presented in Figure 1. The instrument would thus address both the aims of the study. Care was taken to ensure that there was minimum overlap of data collected through other instruments and data sources employed at Unisa. The exit survey instrument catered for the gathering of employer data to allow for a possible follow-up study of employer satisfaction with Unisa graduates. To further address validity, the instrument was sent to key stakeholders and experts for input and was also piloted prior to the full-scale roll-out. This addressed content validity – which is the expert evaluation of the degree to which items represent content to be tested (Weller 2001)

### **Data collection**

The data collection for this survey differed slightly from the traditional approach of administering exit surveys during graduation ceremonies. This survey was conducted online among 2009 Unisa graduandi, thereby allowing graduates a longer time frame for gaining employment before completing the survey. It was hoped that this approach would provide richer information, even though it increased the likelihood of a low response rate.

The survey was administered as an online survey using Survey Monkey software. Participants were invited to participate via e-mail and SMS with a direct link to the survey. Paper-based versions were also sent out to graduates upon request. The reasonable incentive of a prize draw for five iPods was used to encourage graduates to participate.

### **Data analysis**

Data analysis was conducted using IBM SPSS statistical software. While the emphasis of the data analysis was on descriptive statistics, some advanced multivariate statistical analyses were performed using data from selected questions to investigate underlying relationships and emerging hypothetical constructs in the data. Throughout the analysis, data were aggregated, thus ensuring confidentiality. While respondents were invited to submit employer information for use in the event that a follow-up employer survey was conducted, this was not mandatory.

## Methodological norms and ethical considerations

Respondents were fully briefed about the project with this briefing taking the form of a cover page attached to the instrument. Although graduates provided their student numbers, they were assured of confidentiality and of the fact that data would be presented only at an aggregated level which would not identify individuals. Submission of the questionnaire was deemed as informed consent and participants were able to exit the survey at any time.

The validity of the questionnaire was established through extensive literature and peer review of both the conceptual framework and instrument. Stakeholders and students were also invited to comment on the instrument before roll-out. A pilot study was conducted to test the instrument. Prior to analysis, the complete data set was randomly split in order to ensure that the data had stabilised.

## Survey data

The data derived from the survey is presented in the following sections. The first section commences with a discussion about the profile of the graduate study participants. The following sections deal with the two research aims and their sub-questions as illustrated in Table 2.

Table 2: Link between research aims and sub-questions and the various results sections

<b>Aim / Research question</b>	<b>Section/s</b>
<b><i>Aim 1: To explore the appropriateness and relevance of their qualifications for employment from the perspective of graduates</i></b>	
How does a Unisa qualification contribute to students' ability to meet the demands of the workplace?	Section 3.6.2 - Influences on employability skills, beliefs and knowledge
How does completing a qualification at Unisa contribute to students' employability and career advancement?	Section 3.6.5 - Seeking of employment Section 3.6.6 - Profile of Employment Section 3.6.7 - Changes in employment after graduation
<b><i>Aim 2: To explore the dimensions of graduate employability</i></b>	
How does the broader student experience at Unisa facilitate students' transition from a university environment into the workplace?	Section 3.6.2 - Influences on employability skills, beliefs and knowledge Section 3.6.5 - Seeking of employment Section 3.6.8 - Meeting of employment expectations

<p>What are Unisa students' attitudes and approaches to the workplace and career advancement which shape their employment and employability?</p>	<p>Section 3.6.3 - Attitudes and orientations to the job market</p>
<p>What are the employment pathways of Unisa graduates?</p>	<p>Section 3.6.4 - Dominant influences on career choice and career development path                  Section 3.6.5 - Seeking of employment                  Section 3.6.7 - Changes in employment after graduation                  Section 3.6.9 - Further Studies</p>

**Graduate study profile**

The 2009 graduates had enrolled in their studies for a number of reasons (see Figure 3). The majority of students indicated the primary reasons for enrolment as career advancement and meeting the requirements of their chosen occupations (29% and 26% respectively). Interestingly, the third most popular reason for enrolment was having an intellectual or cultural interest in the field of study (18%), which closely relates to the concept of graduateness.

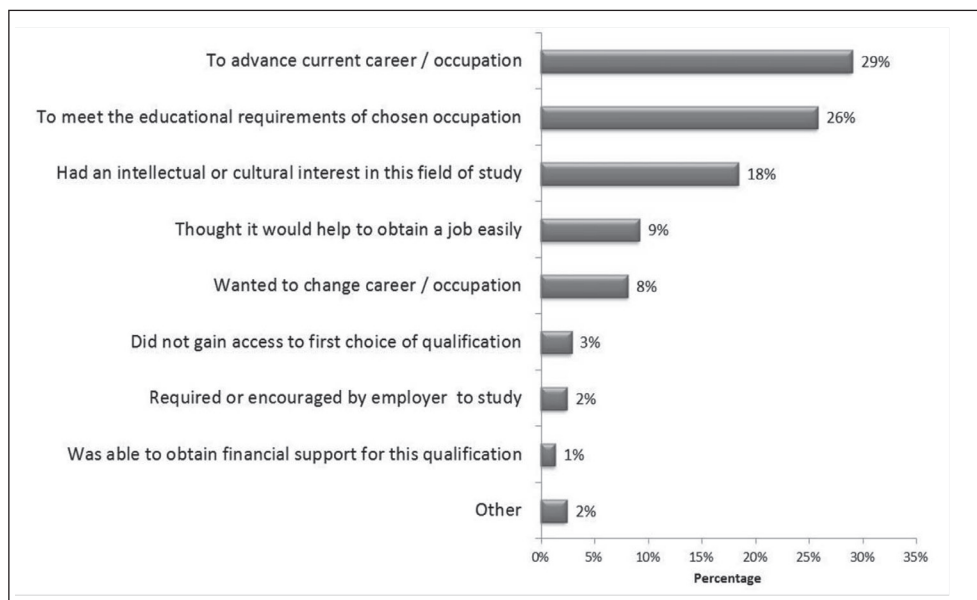


Figure 3: Main reason for enrolment in studies (n=650)

A large proportion (83%) of the respondents indicated that they had been exposed to work during their studies. As to the motivation for such employment during

studies, 47 per cent of responses indicated that the graduates were already working before they commenced their studies, while 18 per cent of responses related to requiring the income that such work generated (see Figure 4). Both wanting to obtain work experience and improving academic performance garnered 10 per cent of the responses.

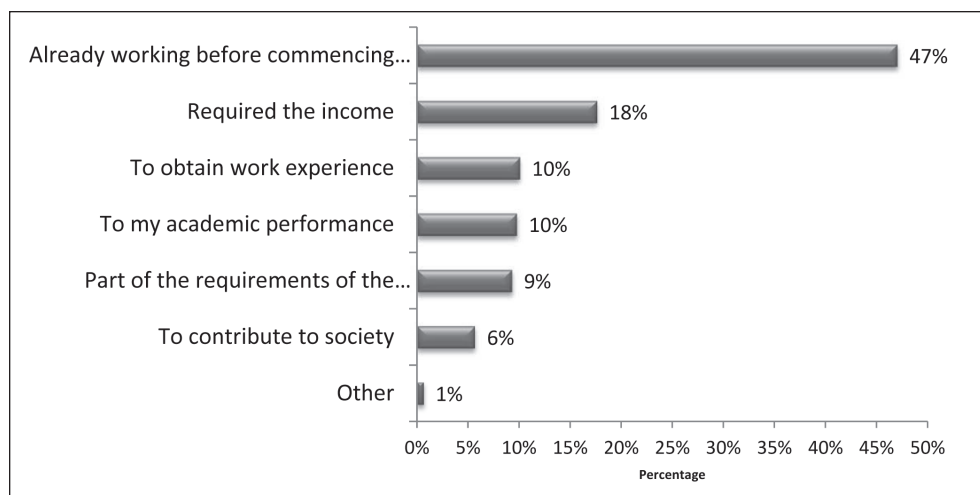


Figure 4: Reason for employment during studies (multiple response set n=636)

The respondents who were exposed to work during studies were asked how many months' exposure they had had to three types of employment (see Table 3). The average student exposed to work related to his or her field of study had spent 17 months in such employment during his or her studies for his or her 2009 qualification. The figure is 12 months for employment arranged by Unisa and for employment not related to the field of study.

Table 3: Type of work exposure during studies

Type of employment	n	Median
Arranged by Unisa (WIL)	101	12 months
Related to field of study	316	17 months
Not related to field of study	195	12 months

### ***Influences on employability skills, beliefs and knowledge***

Two sets of questions in the questionnaire dealt with the perceived extent to which graduates' studies or employment during studies contributed to over 30

employability skills, beliefs and knowledge. These two questions, and the ratings scales employed, lent themselves to a principal component analysis (PCA) with the aim of identifying emerging hypothetical constructs or dimensions. SPSS's Exploratory Factor Analysis procedure was utilised, employing a varimax orthogonal rotation and principal component extraction.

The orthogonal rotation was selected as opposed to an oblique rotation based on the correlation among the variables from the correlation matrix. The orthogonal rotation was used for its simplicity as suggested by Nunnally and Bernstein (1994). The application of PCA to identify emerging constructs contributed towards ensuring convergent and discriminant validity with correlations among items measuring the same construct being uniformly high compared to the correlations between composite dimensions being non-significant. Cronbach alpha values provided a statistical measure of internal consistency reliability as part of convergent validity.

The principal-component analysis relating to the particular contribution of *employment during studies* to employability skills, beliefs and knowledge produced a solution of five factors with eigenvalues greater than unity. These five factors accounted for 68 per cent of the total explained variance.

The stability of the factor solution was validated by two randomised split-half samples. The internal consistency of the scale was measured in terms of an alpha coefficient (Cronbach 1951). The subscale reliabilities (Cronbach alpha) for factors 1, 2, 3, 4 and 5 were 0.95; 0.90; 0.90; 0.87 and 0.97 respectively and therefore exhibited a high internal reliability. Pallant (2010) suggests that, ideally, the coefficient should be above 0.7.

The scoring of the individual items for each respondent relating to the five factors was summated to create subscales out of 5. To test for significant differences between the mean rankings of the newly-formed factors, a Friedman test was performed. The ranking of the contribution of employment during studies to the five subscales is shown in Table 4. The respondents indicated that they felt that employment during studies had contributed higher than average to all their employability skills, beliefs and knowledge. However, they felt that employment had contributed the most to *meta-cognitive skills and efficacy beliefs*, followed by *skilful practice* skills. The respondents felt that employment during studies had contributed the least to *career management skills*.

Table 4: Ranking of relative contribution of employment during studies to the five identified subscales of employability skills, beliefs and knowledge (n≈351)

Subscales	Example items relating to subscale	Mean rank
1. Meta-cognitive skills and efficacy beliefs	<ul style="list-style-type: none"> <li>Your ability to be an independent, resilient, responsible and caring citizen.</li> <li>Your self-confidence</li> <li>Your ability to critically examine your own skills and abilities to determine how you need to improve yourself</li> </ul>	3.49
2. Career management skills	<ul style="list-style-type: none"> <li>Your ability to search or look for employment</li> <li>Your knowledge and expectations of your future workplace</li> <li>Your knowledge of the labour market where you have to compete for employment</li> </ul>	2.39
3. Transferable skills	<ul style="list-style-type: none"> <li>Your communication ability (written and verbal)</li> <li>Your ability to use information and communication technology</li> <li>Your ability to use time effectively</li> </ul>	2.93
4. Academic and study skills	<ul style="list-style-type: none"> <li>Your subject/discipline-specific knowledge</li> <li>Your subject/discipline-specific skills and techniques</li> <li>Your ability to apply your learning and skills in the workplace</li> </ul>	2.85
5. Skillful practice skills	<ul style="list-style-type: none"> <li>Your ability to think of your studies in terms of its application in the workplace</li> <li>Your ability to be adaptable and flexible</li> </ul>	3.33
* Friedman test: $p=0.000$		

The principal-component analysis relating to the particular contribution of the respondents *studies at Unisa* to employability skills, beliefs and knowledge produced a solution of four factors with eigenvalues greater than unity. These four factors (the skilful practice factor was subsumed into the meta-cognitive skills and efficacy beliefs factor) accounted for 64 per cent of the total explained variance.

The stability of a factor solution was validated by two split-half samples. The subscale reliabilities (Cronbach alpha) for factors 1, 2, 3 and 4 were 0.95; 0.90; 0.85 and 0.80 respectively and therefore exhibited a high internal reliability.

The four factors were converted to subscales out of 5 and a Friedman test was applied to calculate statistically significant differences between the mean ranks. The ranking of the contribution of studies at Unisa to the four subscales is shown in Table 5. The respondents indicated that they felt that their studies at Unisa had contributed to a higher degree than average in respect of all the employability skills, beliefs and knowledge. However, they felt that this contributed the most to *meta-cognitive skills, efficacy beliefs and skilful practice*, followed by *academic and study skills*. The respondents felt that their studies contributed the least to *career management skills*.

Table 5: Ranking of relative contribution of studies at Unisa to the four identified subscales of employability skills, beliefs and knowledge (n≈442)

Subscales	Example items relating to subscale	Mean rank
1. Meta-cognitive skills, efficacy beliefs and skilful practice skills	<ul style="list-style-type: none"> <li>• Your ability to be an independent, resilient, responsible and caring citizen.</li> <li>• Your self-confidence</li> <li>• Your ability to think of your studies in terms of its application in the workplace</li> </ul>	2.79
2. Career management skills	<ul style="list-style-type: none"> <li>• Your ability to search or look for employment</li> <li>• Your knowledge and expectations of your future workplace</li> <li>• Your knowledge of the labour market where you have to compete for employment</li> </ul>	1.82
3. Transferable skills	<ul style="list-style-type: none"> <li>• Your communication ability (written and verbal)</li> <li>• Your numeracy (basic mathematics) skills</li> <li>• Your ability to use time effectively</li> </ul>	2.66
4. Academic and study skills	<ul style="list-style-type: none"> <li>• Your subject/discipline-specific knowledge</li> <li>• Your subject/discipline-specific skills and techniques</li> <li>• Your ability to apply your learning and skills in the workplace</li> </ul>	2.73
* Friedman test: p=0.000		

### ***Attitudes and orientations to the job market***

Fifteen statements were employed to establish the attitudes and orientations of respondents to the job market. These items were subjected to a principal-



component analysis with a varimax orthogonal rotation. The analysis produced a solution of four factors with eigenvalues greater than unity. These four factors accounted for 54 per cent of the total explained variance.

The four factors were converted to subscales out of 5 and a Friedman test was applied to calculate significant differences between the mean ranks. The ranking of the attitudes and orientations, represented according to the four subscales, is shown in Table 6. The respondents indicated that the most important factor for them was achieving a *balanced, comfortable lifestyle*. This was followed in importance by the orientation that career mobility would be a part of their career path. This was corroborated by the low ranking of the idea of *loyalty to one organisation* as an orientation to the job market.

Table 6: Ranking of different attitudes and orientations to the job market (n≈434)

Subscales	Example items relating to subscale	Mean rank
1. Loyalty to one organisation	<ul style="list-style-type: none"> <li>I prefer to be loyal to one organisation</li> <li>I see myself achieving career advancement in one organisation</li> </ul>	1.75
2. Career mobility	<ul style="list-style-type: none"> <li>I desire job (specific job description) variety</li> <li>I like to seek new job opportunities as part of my career growth and development</li> </ul>	2.76
3. Balanced, comfortable lifestyle	<ul style="list-style-type: none"> <li>I desire achieving a balance between work and my personal/family life</li> <li>I desire achieving a comfortable lifestyle</li> </ul>	3.42
4. Responsibility for own career management	<ul style="list-style-type: none"> <li>I don't need assistance and guidance in order for me to make appropriate career decisions</li> <li>I feel responsible for managing my own career without the help of others</li> </ul>	2.06
* Friedman test: $p=0.000$		

### ***Dominant influences on career choice and career development path***

The respondents indicated that subject/discipline knowledge and skills, along with personal and individual attributes and skills, had the greatest influence on career choice and development (see Table 7). An opportunity to provide service to others and achieving a work/life balance were also rated as highly important factors.

Table 7: Dominant influences on career choice and career development path (n≈434)

<b>Influence</b>	<b>Percentage indicating more than average importance</b>
Subject /discipline knowledge and skills	88%
Personal or individual attributes and skills	88%
Opportunity to provide service to others	85%
Achieving work/life balance	83%
Financial considerations	82%
Having a challenging occupation	77%
Opportunity to show leadership and management skills	76%

### **Seeking of employment**

The majority of respondents (59%) indicated that they had actively sought employment after completing their qualifications in 2009. Posting their details on the internet, as well as responding to internet and printed advertisements, were the most popular methods of seeking employment (see Table 8). On average, very little to no use was made of other methods mentioned – such as seeking help from Unisa’s Department of Counselling and Career Development (DCCD), placing advertisements in newspapers, and making use of the Department of Labour’s employment services or the services of employment agencies.

Table 8: Most popular methods of seeking employment (n≈434)

<b>Method</b>	<b>Higher than Average</b>
1. Posted details (CV) on the internet	63%
2. Responded to an internet advertisement	62%
3. Responded to a printed advertisement	61%

Some 70 per cent of those respondents who had actively sought employment after graduation were already employed and were therefore looking for alternative employment. The 2009 graduates started seeking employment early, with 70 per cent of them seeking employment before graduation or within three months of graduation (see Figure 5).

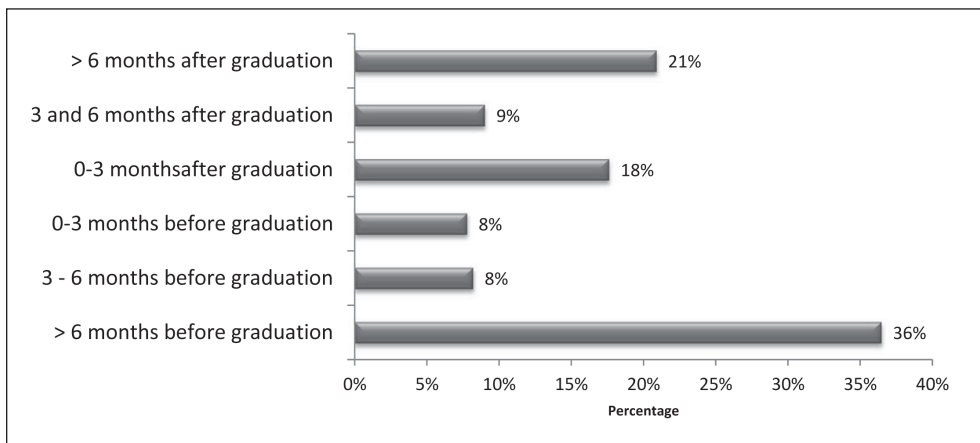


Figure 5: Commencement of seeking of employment (n=244)>

For those not actively seeking employment after graduation, 50 per cent indicated that it was because they were already employed, while 28 per cent indicated that it was because they were continuing their studies or had decided to continue their studies (see Figure 6). Some 8 per cent indicated that their reason for not seeking employment was that they were self-employed, while 7 per cent had continued employment as part of a bursary or scholarship arrangement.

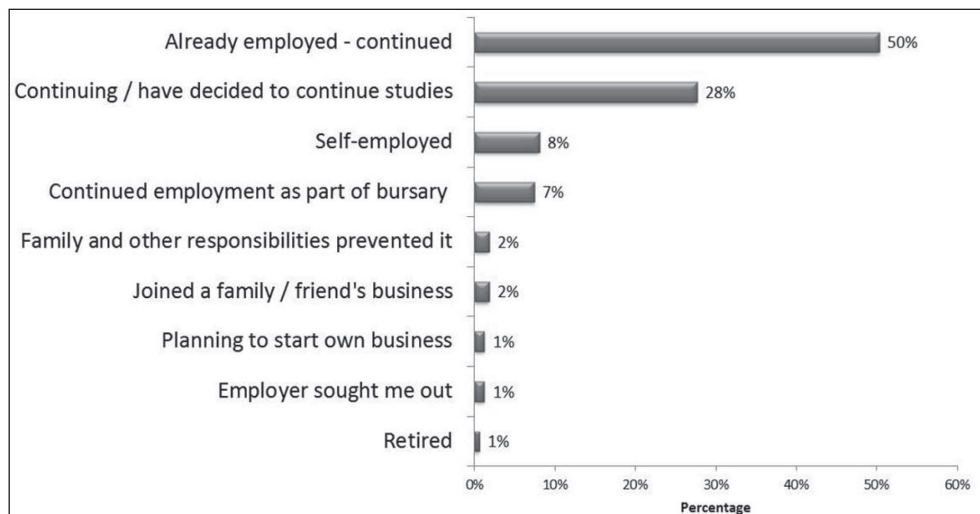


Figure 6: Reason for not seeking employment after graduation (n=163)

Of the respondents who were not employed during their studies and who had actively sought employment, 54 per cent had found employment. For those who

had found employment it had taken an average of 5.7 months to do so. The number of job applications which translated into interviews and, finally, into employment offers, is illustrated in Figure 7. For the graduates who had not been employed during their studies and who had subsequently found employment, a median of 20 job applications had resulted in three job interviews and finally one job offer. For those who had not found work, a median of 21 job applications had resulted in 1.5 job interviews and no job offers. It seems that for those who did not find employment, the difficulty was in translating job applications into interviews. It may be that those graduates struggling with finding work may need support in improving their abilities to respond to advertisements and to market their skills and knowledge in written format.

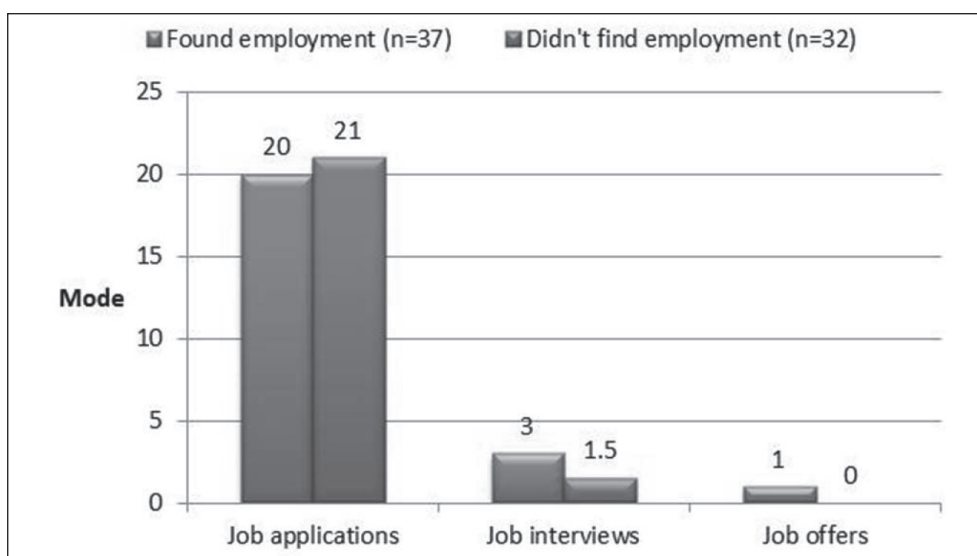


Figure 7: Translation of employment seeking to employment offers>

Those graduates who had not found employment indicated that they perceived the reasons for this to be lack of experience (20%), the high levels of unemployment in the country (15%), racial prejudice (10%), under-qualification (9%) and affirmative action (9%) (see Figure 8).

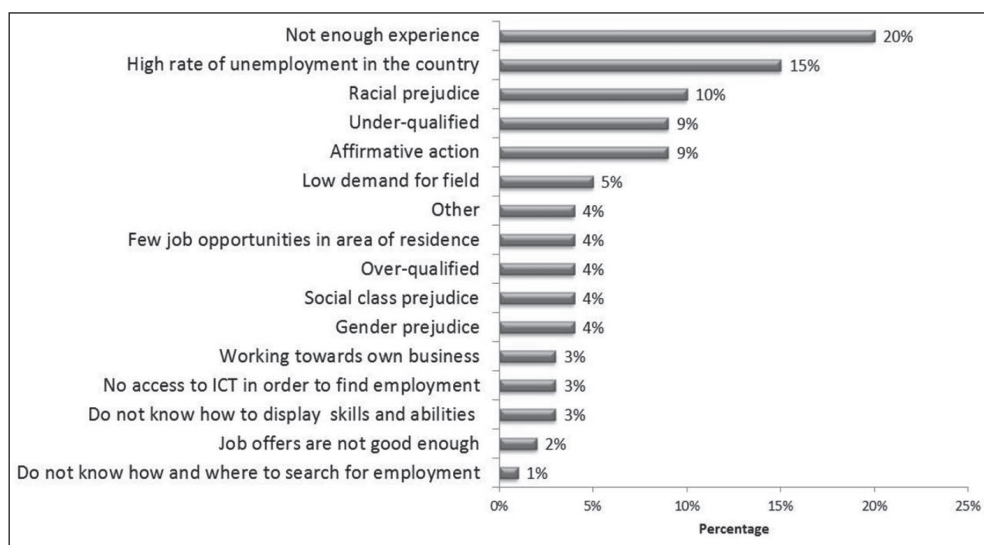


Figure 8: Perception of main reason for not finding employment (multiple response set, n= 100 responses)>

### **Profile of employment**

For those 2009 graduates who had found or maintained their employment after graduation, the vast majority had found permanent employment, either in permanent (73%) or contract positions (15%) (see Figure 9).

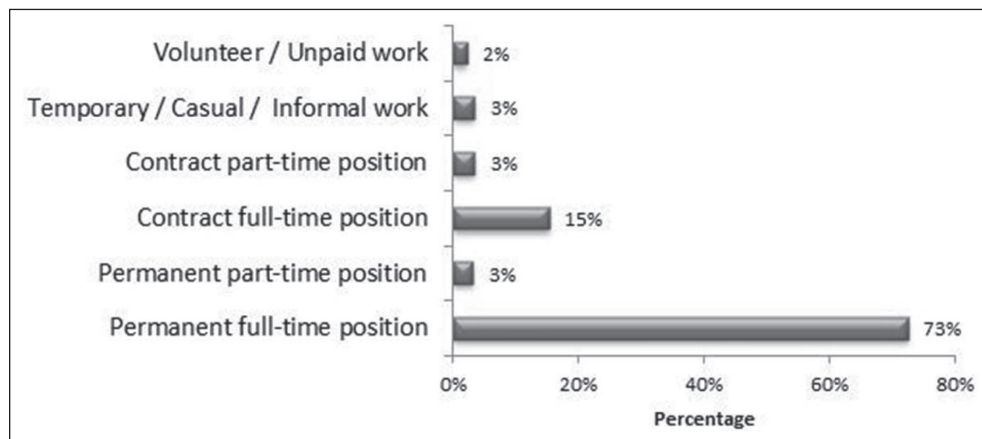


Figure 9: Type of employment found or maintained (n=320)>

The employed 2009 graduates were employed mainly in community, social and personal services – other, followed by financial intermediation and insurance,

general government services, manufacturing and business (see Table 9). The large representation of 2009 graduates in the community, social and personal services – other sector (20%) can probably be attributed to their employment in the education field, as teaching is in this category.

Table 9: Five most common industries/fields/sectors of employment of 2009 graduates

<b>Most common industries / fields / sectors</b>	
1. Community, social and personal services - other (not professional) <sup>i</sup>	20%
2. Financial intermediation and insurance <sup>ii</sup>	13%
3. General government services <sup>iii</sup>	12%
4. Manufacturing <sup>iv</sup>	11%
5. Business services – other (not professional) <sup>v</sup>	10%
Includes public administration and defence, education, health and social work, membership organisations, non-profit, recreational, cultural and sporting activities.	
Includes financial and other monetary intermediation, pension funds, personal, business and household insurance.	
Includes municipal, parastatal services.	
Includes any manufacturing, production, processing and preservation of foods, beverages, tobacco, clothes, metals, machinery, recorded media, chemicals and basic chemicals, tanning and dressing of leather, publishing, printing.	
Includes ITC support, database activities, renting of machinery, equipment and household goods, consultancy not professional, advertising, technical activities.	

The majority of 2009 graduates felt that they were appropriately qualified (56%) for their employment (see Figure 10) and that their studies were directly related to their employment (59%) (see Figure 11). Only a small proportion of graduates felt underqualified or that their employment was unrelated to their 2009 qualification.

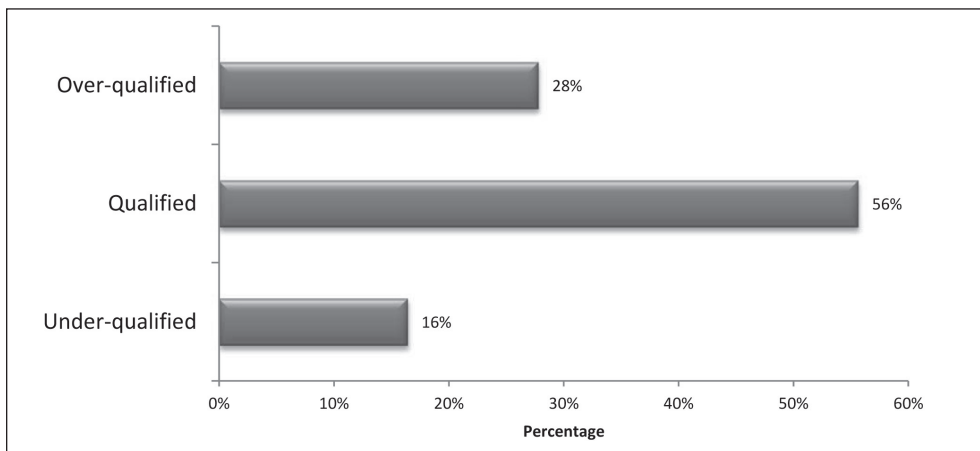


Figure 10: Perceived level of qualification in relation to employment (n=316)

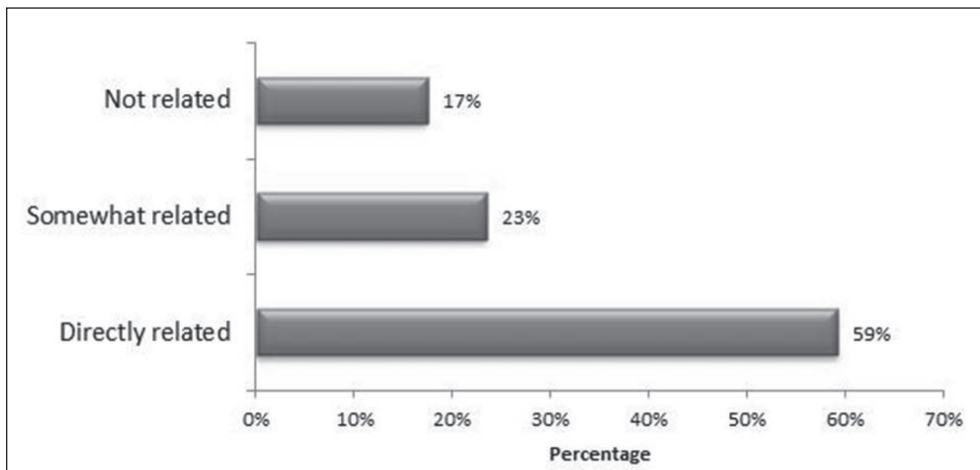


Figure 11: Perceived relationship between studies and employment (n=316)

### ***Changes in employment after graduation***

In terms of changes for those already employed during studies, 74 per cent of responses indicated positive changes in existing employment after graduation (see Figure 12). These changes included graduates feeling better equipped to perform their duties, a salary increase, more respect in the workplace and promotions.

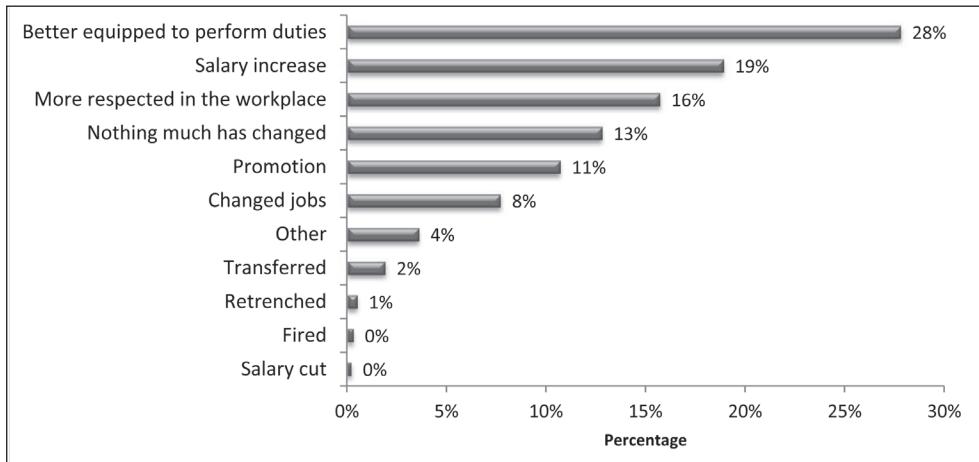


Figure 12: Changes in employment after graduation for those already employed (multiple response set n=587 responses)

### Meeting of employment expectations

The majority of employed graduates felt that their expectations were being met or exceeded in terms of salary (62%) and job satisfaction (70%) (see Figure 13). More graduates felt that their salary expectations were not being met as compared to their job satisfaction expectations.

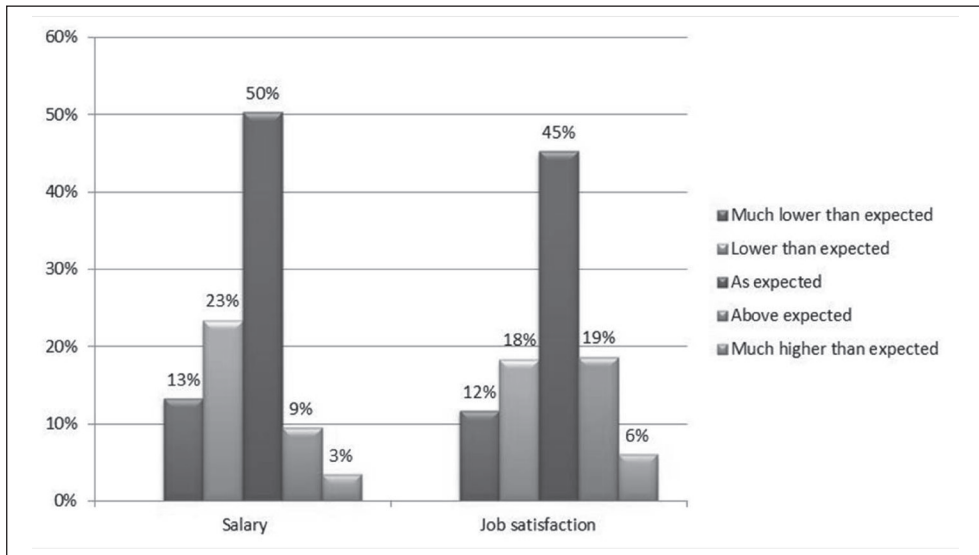


Figure 13: Meeting of employment expectations (n=316)



In both the case of salary (see Figure 14) and job satisfaction (see Figure 15), it is those students who did not have previous employment experience who felt that their expectations were not being met. Previous exposure to the work environment therefore seems to help graduates to form more reasonable expectations and may also improve students' ability to attain employment that meets their existing expectations.

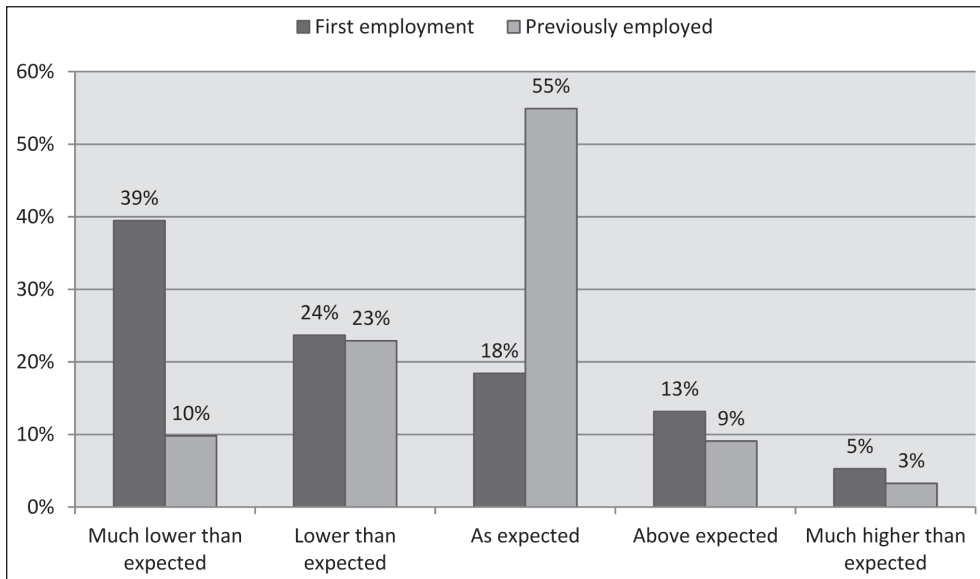


Figure 14: Meeting of salary expectations in terms of exposure to previous employment

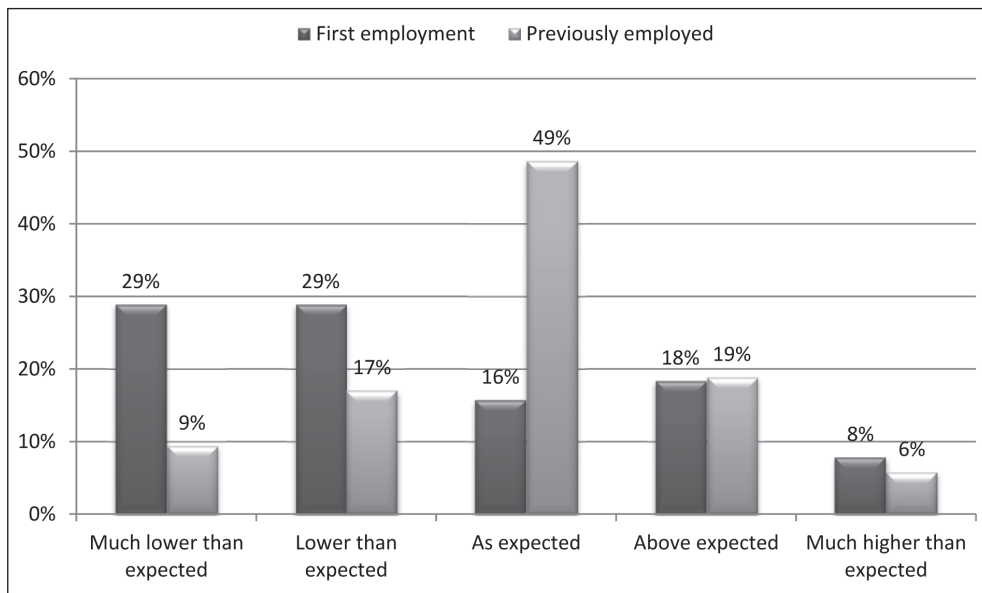


Figure 15: Meeting of salary expectations in terms of exposure to previous employment

### **Further studies**

The vast majority of graduates (92%) indicated that they were studying further, were considering further studies or had already completed some additional studies (see Figure 16). Of these respondents, 82 per cent indicated Unisa as their institution of choice for further studies.

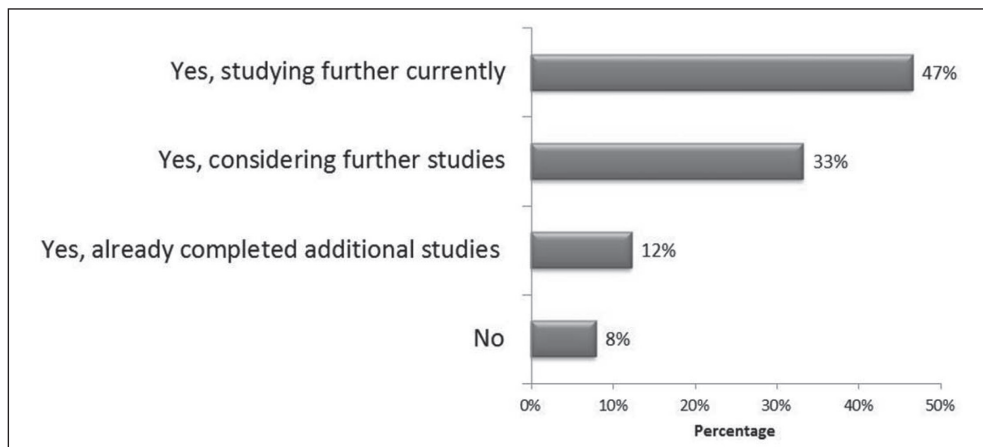


Figure 16: Further studies (n=391)

Of the respondents who were studying further, had already completed further studies or were considering further studies, 75 per cent indicated that they would continue with studies in the same field. The majority of these graduates would enter into further studies on the post-graduate level below Masters level (see Figure 17).

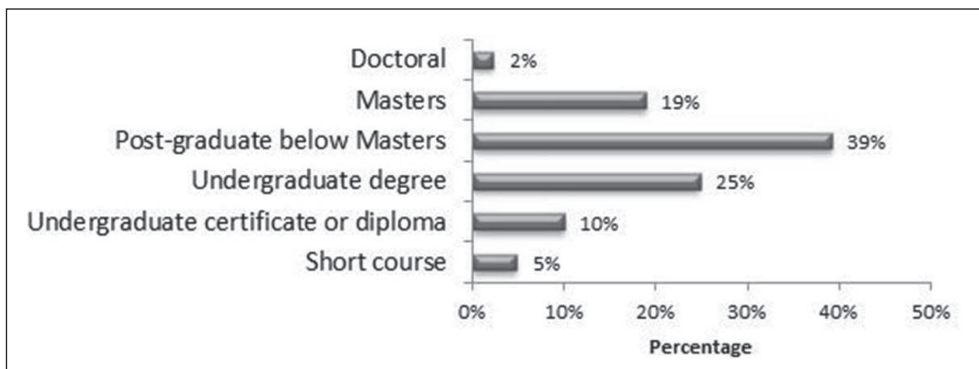


Figure 17: Level of further studies (n=391)

## DISCUSSION

A key research aim of this study was to explore the dimensions of employability, and this was addressed under the heading ‘Seeking of employment’ in order to draw attention to this activity on the part of graduates. The research questions addressed in this section are: ‘How does the broader student experience at Unisa facilitate students’ transition from a university environment into the workplace?’

and ‘What are the employment pathways of Unisa graduates?’ The results indicated that 54 per cent of those who weren’t employed during their studies and were seeking employment found employment. For those respondents who had found employment, it took an average of 5.7 months to do so. This falls between the time-to-employment rates for Estonia (4.4 months) and Turkey (6.8 months) as reported in the 2009 HEGESCO and REFLEX Data (Allen and Van der Velden 2009). These two studies focussed on European countries. Estonia and Turkey reported the longest period from graduation to employment of all the participating countries, while Norway, at one month, reported the shortest (Allen and Van der Velden 2009).

For those respondents who failed to secure employment, the main reasons cited for this were lack of experience, high unemployment in the country, racial prejudice, affirmative action and under-qualification. These reasons illustrate both internal and external locus of control in unemployment attribution. Those students who were employed during their studies noted that, mostly, they felt better equipped to perform their duties, received salary increases or were more respected in the workplace post-graduation. Their Unisa qualifications, therefore, clearly improved their employability.

With regard to the key research aim of exploring the appropriateness and relevance of their qualifications for employment from the perspective of graduates, the profile of employment yielded interesting results. This was given attention under the heading ‘Profile of employment’ and addresses the following research question: ‘How does completing a qualification at Unisa contribute to students’ employability and career advancement?’ The respondents indicated that they had, mostly, found employment related to their field of study and that they perceived themselves as being appropriately qualified for their employment. The vast majority (88%) of employed 2009 Unisa graduates surveyed had full-time positions. The key research aim of exploring the dimensions of graduates’ employability is addressed under the heading ‘Meeting of employment expectations’. The research reveals that only a minority of graduates’ expectations of salary level and job satisfaction had not been met (36 per cent and 30 per cent respectively) and these were mainly students who had not been employed during their studies.

The respondents indicated that they had enrolled in studies mainly for advancement in or qualification for a particular career (55%). The majority of students had been employed during their studies (83%). Both research aims of this study – namely exploring the appropriateness and relevance of their qualifications for employment from the perspective of graduates and exploring the dimensions of graduate employability are addressed under the heading ‘Influences on

employability skills, beliefs and knowledge'. In particular, this part of the study addresses the following research questions: 'How does a Unisa qualification contribute to students' ability to meet the demands of the workplace?' and 'How does the broader student experience at Unisa facilitate students' transition from a university environment into the workplace?' Respondents indicated that employment during studies had contributed highly to all their employment skills, beliefs and knowledge. However, they felt that employment during studies contributed most of all to *meta-cognitive skills and efficacy beliefs*, followed by *skilful practice skills*. The respondents felt that employment during studies had contributed the least to *career management skills*. The respondents indicated that their studies at Unisa had also contributed highly to all their employment skills, beliefs and knowledge. They felt that their studies had contributed the most to *meta-cognitive skills, efficacy beliefs and skilful practice*, followed by *academic and study skills*. The respondents felt that their studies had contributed the least to *career management skills*.

The results under the heading 'Attitudes and orientations to the job market' address the research aim of exploring the dimensions of employability. In particular, the following research question is addressed: 'What are Unisa students' attitudes and approaches to the workplace and career advancement which shape their employment and employability?' The respondents indicated that the most important attitude and orientation towards the job market was achieving a *balanced, comfortable lifestyle*. This was followed in importance by the orientation that *career mobility* would be a part of their career path. This was reaffirmed by the low ranking of the idea of *loyalty to one organisation* as an orientation to the job market. The majority of students used the internet for seeking employment, although printed advertisements also served as a major avenue for seeking employment. Little to no use was made of any other methods of seeking employment. Of those respondents who sought employment after graduation, 70 per cent started seeking employment before or within three months of graduation.

The section under the heading 'Further studies' presents the findings on students' further studies and, in so doing, addresses the following research question: 'What are the employment pathways of Unisa graduates?' The vast majority of students (92%) indicated that they were currently studying, had completed (or were considering) further studies. Of these students, 82 per cent indicated Unisa as their institution of choice for these studies, a positive testament to Unisa's success in providing flexible learning opportunities for employed students.

## CONCLUSION

It would seem that the majority of 2009 graduate respondents either maintained or secured first time employment post-graduation. A large proportion of students were not seeking employment after graduation, mainly as they were already employed or otherwise involved, or were considering further studies. Unisa seems to be supporting students well in the development of employment skills and exposure to employment during studies also contributes significantly to this. Further support in the development of career management skills would, however, be beneficial to graduates. While graduates appear to be embarking on employment seeking early, it seems that some graduates have difficulty converting job applications into interviews and this may indicate a need for support in responding to advertisements and producing curricula vitae. This seems to be supported by data indicating that both studies and employment during studies contribute the least to career management skills of all the skills assessed. The data from this study may be beneficial in supporting Unisa – and, more specifically its student counselling and support division – to facilitate career counselling and support services.

It is envisaged that this survey will be followed by an employer survey to examine the effectiveness and fit of Unisa graduates in their employment. It is also envisaged that this study will be repeated in order to collect trend data on Unisa graduates' employability. This would provide data on any shifts in the employability of Unisa graduates and also serve as an indicator of the possible influence of Unisa's efforts in increasing graduate employability.

Unisa provides a somewhat unique environment for the study of graduate employability in South Africa, in that many of its students are employed prior to graduation. However, it is likely that many of the trends would be similar for other institutions in South Africa and internationally, in particular where distance education is employed. The methodology of the study stepped away from the methodology employed in graduate surveys administered at graduation ceremonies. This allowed for greater time for students to find employment. This may be a valuable approach for South African higher education institutions as securing employment in South Africa can be quite challenging. It may also provide critical insights for institutions abroad who might find value in adopting such a methodological approach. The study reiterates the importance of maintaining the Alumni database to allow for the study of graduate employability. The conceptual framework will also contribute to the development of holistic graduate employability surveys in different contexts.

## NOTE

- 1 Graduate employability is hereafter referred to simply as employability.

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