

PERCEIVED EMPLOYABILITY OF UNIVERSITY STUDENTS IN SOUTH AFRICA. IS IT RELATED TO EMPLOYABILITY SKILLS?

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—Abstract —

The on-going changes in the workplace demand that the current and future generation of workers should be well trained since their knowledge, skills and positive attitude are essential to cope with the demands of the modern world. For this reason, university students, who are the future generation of the labour force, need to gear themselves up for a tough journey in the prevailing economic conditions. Previous research has revealed that the possession of employability skills has the potential to ascertain successful careers for students, as they will be more employable during their working life. Therefore, this study aimed to investigate the relationship between employability skills of university students and their perceptions of employability. A quantitative research approach was adopted. A self-administered questionnaire was distributed among university students at four universities in South Africa and data were analysed from 485 participants. Exploratory factor analysis was used to establish the factors. Correlation analysis was used to establish whether there is any relationship between employability skills and perceived employability among university students in South Africa. The majority of students regard themselves as possessing employability skills. Furthermore, the findings revealed that there is a positive relationship between students' employability skills and their perceptions of employability. The conclusion drawn from this finding is that university students, with the appropriate knowledge and skills acquired from different fields of study, are likely to have higher self-confidence and may, therefore, influence the state of the labour market. It is recommended that employability skills should be incorporated into the curriculum in order to enhance employability of students.

Key Words: employability, employability skills, university students, South Africa

JEL Classification: J24

1. INTRODUCTION

The interest in employability continued to grow throughout the decades and towards the end of the 1950s and during the 1960s the focus shifted towards the potential of persons obtaining employment by focusing on their labour market history (De Grip, Van Loo and Sanders, 2004). During the 1970s it became an economic imperative for employees to increase their employability, while the 1980s were marked by constant change, which compelled companies to approach employability as a human resource instrument to optimise deployment within the business (Forrier and Sels, 2003). The beginning of the 1990s was characterised by the controlling of the instability of intra-organisational job markets and organisations emphasised lifetime employment as a guiding principle (Thijssen, Van Der Heijden and Rocco, 2008). Much of the focus recently is on securing rather than finding employment (De Cuyper, Bernard-Oettel, Berntson, De Witte and Alarco, 2008).

University students, who are the future generation of the labour force, need to gear themselves for a tough journey in the prevailing economic conditions. Therefore, it is in the best interest of students to develop new skills and knowledge as this is important regarding their employability (Van Dam, 2004). Undoubtedly, the possession of employability skills has the potential to ascertain successful careers for students, as they will be more employable during their working life (Forrier and Sels, 2003). For this reason and many others, formal education together with competence development and job tenure would be important features for students' perceived employability (Berntson, Sverke and Marklund, 2006).

2 LITERATURE REVIEW

Employability skills are generic in nature and include the cognitive and soft skills that enable an individual to apply the acquired knowledge and skills (Jackson and Chapman, 2012). They cut across industries and jobs from entry level to the highest level in the business (Cassidy, 2006). It is therefore essential, particularly for university students, to develop a range of personal attributes and employability skills above and beyond the specific abilities in an academic or vocational discipline (Shah, Peel and Brooke, 2004) because education and training contribute to one's development beyond the academic years. Furthermore, employers assign an important value to the development of employability skills, particularly those of graduates (Jackson, 2013), as these skills assist a person to

get, keep and do well in a job. For this reason, there is unprecedented attention towards the current state and future of graduates (Jackson, 2010). The on-going changes in the workplace demand that workers should be well trained since their knowledge, skills and positive attitude are essential to cope with the demands of the modern world (Bakar and Hanafi, 2007)

2.1 Employability skills of university students

In a study among graduates at the University of Missouri, Robinson and Garton (2008) found that students regard problem solving, working independently, dealing with stress, staying positive and listening as important skills in terms of their employability. Similarly, in Sri Lanka, Wickramasinghe and Perera (2010) found that employers, university lecturers and students rank problem solving as an important employability skill. Graduates from Bournemouth University in the United Kingdom identified teamwork, communication, self-motivation, personal organisation and subject knowledge as the most useful skills (Shah et al., 2004). Zaharim, Yussof, Omar, Mohamed and Muhamad (2009) investigated the required employability skills for new engineers in Malaysia, Japan, Singapore and Hong Kong. Employers in all the four countries viewed communication, problem solving and interpersonal skills as the most important skills.

The growing interest in graduate employability came about as a consequence of employers reporting a deficiency in some of the most basic skills required of graduates to render them unemployable (Tymon, 2013). In Vietnam, the shortage of employability skills among graduates is viewed as contributing to the high unemployment among young people (Tran, 2010). In Pakistan, employers complain about weak communication, practical and presentation skills among graduates (Warraich and Ameen, 2011). Due to the shortage of the necessary skills and attributes, it is estimated that at one time 60 000 graduates in Malaysia were unemployed, even though jobs were available (Singh and Singh, 2008). Similarly, in the South Pacific Island nation, although employers were concerned with the development of generic business skills and attributes for effective on-job performance (Bhanugopan and Fish, 2009). In Australia, Jackson and Chapman (2012) found that graduates lacked important elements of managerial skills set such as critical thinking and decision management.

2.2. Employability skills of university students in South Africa

In South Africa, universities heeded the call and stressed the importance of their students' employability and placed it at the top of the priority list. For example, the University of South Africa (UNISA) views employability of its students as an indicator of the institution's capability to deliver qualifications that meet the demands of a globalised knowledge economy (Archer and Chetty, 2013). Similarly, the North-West University expects graduating students to have acquired the necessary competencies and abilities to land available jobs (Oladele, Nyambi and Mabe, 2013). Notwithstanding, employers complain about the quality of graduates while universities feel that employers are not appreciative of their contribution in producing appropriate graduates (Griesel and Parker, 2009).

In South Africa, since the dawn of democracy in 1994, the unemployment rate among highly skilled graduates has increased (Pauw, Oosthuizen and Van der Westhuizen, 2008; Kraak, 2010). In their study among employers of graduates in South Africa, Griesel and Parker (2009) found that although employers were generally satisfied with the quality of graduates, they expressed concerns regarding cognitive skills and proactive engagement of graduates. Similarly, Zwane, Du Plessis and Slabbert (2014) surveyed employers in the tourism industry and reported that employers expressed dissatisfaction with the shortage of high-level competencies among graduates, such as handling customers professionally and pro-activeness when solving problems.

Contrary to the aforementioned, some researchers put forward a different perspective regarding the quality and employability of South African graduates. One such view is that a substantial number of graduates from South Africa went abroad and made their mark as students or workers (Vakalisa, 2005). As a consequence, many South African companies face a challenge of keeping new graduates, as it is easier for graduates to leave and find employment that is more rewarding (Pop and Barkhuizen, 2010). Van Der Berg and Van Broekhuizen (2012) share a similar view and contend that there is no graduate unemployment crisis in South Africa. They based their argument on the fact that during the period 1995 and 2011 about 640 000 graduates entered the labour market and nearly 610 000 of them were employed. It is beyond the scope of this study to enter the debate on who is right and who is wrong in terms of graduate employability in South Africa.

There is a view that states that the state of the labour market may determine whether a student will be employed. In other words, the knowledge of the type of

work opportunities that exist in the labour market, their entry requirements (Hillage and Pollard, 1998), the ability of the graduate to search for employment and the knowledge and expectations of his/her future workplace may improve his/her chance of being employed (Archer and Chetty, 2013). Similarly, the perceived status differences among fields of study influence the demand for graduates with degrees in particular fields (Rothwell, Herbert and Rothwell, 2008; Radcliffe, 2005). The required mix of knowledge and skills is viewed also as contributing positively to the employability of graduates (Oliver, Hunt, Jones, Pearce Hammer, Jones and Whelam, 2010). Furthermore, there is also a view suggesting that self-confidence influences the perceptions of students regarding their employability since individuals with high self-confidence tend to show overall self-esteem, which makes them adapt easily to changing circumstances, look forward to working with new different people and willing to take risks (Potgieter, 2012). The purpose of this study was to investigate the relationship between employability skills and the perceptions of university students on employability. Based on the review of the literature the following hypothesis was formulated:

H₁: There is a positive relationship between employability skills and perceptions of employability among university students.

3. RESEARCH METHODOLOGY

A quantitative research approach was followed in this article. The selection of this method is in line with the nature of the data that the researcher wants to obtain. A quantitative approach is systematic and objective and seeks to quantify data by applying some form of statistical analysis (Malhotra, 2010). An extensive literature search on employability and employability skills was conducted.

3.1 Sampling and sampling techniques

A non-probability convenience method was used to select the sample. Four universities were selected based on accessibility and cost-effectiveness. Consistent with previous similar studies (Bonn, Janeke and Kruger, 2009) the sample size was set at 800 students. During the survey, of the 800 questionnaires that were distributed, 524 were returned, giving a response rate of 65.5%. The returned questionnaires were subjected to screening and 39 were rejected because they were incomplete or illegible. Therefore, 485 questionnaires were used in the final analysis.

3.2 Measuring instrument and data collection

A questionnaire was developed to investigate the employability skills of university students and their perceptions regarding employability. Section A comprised questions requesting demographic information of students. Section B of the questionnaire comprised items investigating the perceptions of university students regarding their employability skills. Section C of the questionnaire comprised items relating to students' perceived employability. The items in Section B and C were scored on a six-point Likert scale ranging from one (strongly disagree) to six (strongly agree). A pilot study was conducted among 50 students. The researcher administered the questionnaire. In most cases, the questionnaires were administered face-to-face. This ensured that they were properly completed and secured a high response rate.

3.3 Reliability and validity

Cronbach's alpha coefficient was used to measure the internal reliability of all the constructs in the questionnaire. All the reliability values ranged from 0.64 to 0.87 (Table 2). These were above the recommended 0.6 (Malhotra, 2010). Construct and convergent validity were assessed through exploratory factor analysis and there were no cross-loadings. Both the scales for employability skills and perceived employability affirmed construct and convergent validity.

3.4 Data analysis

The Statistical Package for Social Sciences (IBM SPSS version 23) was used to analyse data. Descriptive statistics were used to establish the demographic profile of participants. Exploratory factor analysis was used to identify the factors that explain the perceptions of university students regarding the employability skills and perceived employability. Correlation analysis was conducted to investigate whether there was any relationship between employability skills of students and their perceptions of employability.

3.5 Ethical considerations

A number of ethical considerations were adhered to in the study. Permission was obtained from the selected institutions and the necessary arrangements were made to administer the questionnaire. The purpose of the study was explained to would-be participants. They were informed that participation is voluntary and they could withdraw at any time without repercussions. Furthermore, participants were assured of anonymity and confidentiality.

4. RESULTS

4.1 Demographic profile of the sample

Of the 485 (n=485) participants 81 percent were Black students. The majority of the participants had enrolled for commerce qualifications, constituting 36%(n=173) followed by students from other degrees at 27%(n=131), education at 15%(n=72) and IT at 14%(n=68). In terms of the year of study, third year students accounted for a higher percentage of participants, constituting 62%(n=301). Second years and postgraduates constituted 18%(n=87) and 20%(n=97) respectively. In terms of gender, males constituted 38%(n=171) and females 62% (n=282).

4.2 Exploratory factor analysis

Exploratory factor analysis was performed on the data in sections B and C using the SPSS. Principal component analysis (PCA) with varimax rotation was conducted on employability skills and perceptions of employability. Prior to the factor analysis procedure, Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) test were used to check whether the data were suitable for factor analysis. For employability skills, the KMO measure of sampling adequacy value of 0.909 indicated that the data were appropriate for analysis and the Bartlett's test of sphericity was significant at 0.000, supporting the factorability of the correlation matrix. Ten factors with an eigenvalue of more than one were extracted. The cumulative variance explained was 63,382%. In terms of the perceived employability scale, the KMO measure of sampling adequacy value of 0.882 indicated that the data were appropriate for analysis and the Bartlett's test of sphericity was significant at 0.000 supporting the factorability of the correlation matrix. Four factors emerged for perceptions of employability scale. Collectively these factors explained the perceived employability of university students. The cumulative variance explained was 58.291%. The final factor structure is reported in Table 1.

Table 1: Scale reliability

Research constructs		Descriptive statistics		Cronbach's test		Factor Loading
		Mean	SD	Item-total	α value	
Adaptability skills	ADAPT1	4.93	.60	0.824	0.84	.858
	ADAPT2			0.840		.763
	ADAPT3			0.815		.760
	ADAPT4			0.808		.671
	ADAPT5			0.816		.662
	ADAPT6			0.810		.563
	ADAPT7			0.813		.503
	ADAPT8			0.813		.441
Analytical and problem-solving skills	ANA1	4.65	0.67	0.578	0.64	.802
	ANA2			0.606		.697
	ANA3			0.482		.675
Creative thinking skills	CRT1	4.77	0.65	0.510	0.68	.883
	CRT2			0.467		.847
	CRT3			0.753		.556
Human skills	HUM1	4.73	0.76	0.856	0.87	.827
	HUM2			0.846		.791
	HUM3			0.842		.736
	HUM4			.0847		.728
	HUM5			0.840		.726
	HUM6			0.864		.711
	HUM7			0.845		.677
	HUM8			0.852		.644
	HUM9			0.852		.561
English language proficiency skills	ENG1	5.25	0.65	0.806	0.83	.849
	ENG2			0.972		.810
	ENG3			0.783		.772
	ENG4			0.799		.747
	ENG5			0.813		.684
	ENG6			0.835		.609
Information, communication and technology skills	ICT1	5.23	0.69	0.787	0.82	.854
	ICT2			0.763		.803

Research constructs		Descriptive statistics		Cronbach's test		Factor Loading
		Mean	SD	Item-total	α value	
	ICT3			0.789		.782
	ICT4			0.803		.726
	ICT5			0.801		.719
Personal organisation and time management skills	PTM1	4.88	0.71	0.853	0.87	.832
	PTM2			0.850		.827
	PTM3			0.833		.802
	PTM4			0.866		.725
	PTM5			0.837		.715
	PTM6			0.842		.711
	PTM7			0.852		.640
Leadership skills	LE1	4.94	0.72	0.773	0.84	.850
	LE2			0.787		.847
	LE3			0.825		.824
	LE4			0.774		.713
	LE5			0.842		.638
Oral communication skills	OC1	4.89	0.65	0.802	0.84	.840
	OC2			0.836		.832
	OC3			0.794		.832
	OC4			0.799		.796
	OC5			0.801		.591
	OC6			0.811		.445
	OC7			0.838		.389
Written communication skills	WC1	4.63	0.87	0.866	0.84	.953
	WC2			0.797		.944
	WC3			0.730		.717
	WC4			0.740		.489
The state of the labour market	SLM1	4.79	0.73	0.628	0.84	.862
	SLM2			0.635		.788
	SLM3			0.647		.740
	SLM4			0.656		.690
	SLM5			0.823		.575
	SLM6			0.651		.537
The field of study	FOS1	4.43	0.81	0.549	0.77	.732
	FOS2			0.550		.705
	FOS3			0.512		.694
	FOS4			0.744		.654
	FOS5			0.551		.476
Knowledge and skills	KNS1	4.76	0.81	0.691	0.80	-0.753
	KNS2			0.758		-0.733
	KNS3			0.730		-0.711
Self-confidence	SLC1	4.90	0.78	0.573	0.73	.848
	SLC2			0.573		.814

ADAPT 1 to ADAPT 8 = Adaptability skills items. ANA 1 to ANA 3 = Analytical and problem solving skills items. CRT 1 to CRT 3 = Creative thinking skills items. HUM 1 to HUM 9 = Human skills items. ENG 1 to ENG 6 = English language proficiency skills items. ICT 1 to ICT 5 = Information, Communication and Technology skills items. PTM 1 to PTM 7 = Personal organisation and time management skills items. LE 1 to LE 5 = Leadership skills items. OC 1 to OC 7 = Oral communication skills items. WC 1 to WC 4 = Written communication skills items. SLM 1 to SLM 6 = The state of the labour market items. FOS 1 to FOS 5 = The field of study items. KNS 1 to KNS 3 = Knowledge and skills items. SLC 1 to SLC 2 = Self-confidence items.

4.3 Correlations

Pearson correlation coefficient was used to investigate the relationship between employability skills and perceptions of employability among university students. The correlation matrix in Table 3 revealed a statistically positive relationship between employability skills and all the factors that describe perceived employability, namely the state of the labour market, field of study, knowledge and skills and self-confidence at $p < 0.01$ level. This, therefore, supports the hypothesis that, *there is positive relationship between employability skills and*

perceptions of employability among university students'. This can be interpreted as suggesting that the fact that university students regard themselves as possessing employability skills correlates with their perceptions of employability. Put differently, in their view, for them to become employable they need employability skills. This finding supports Robinson and Garton's (2008) findings in which students regarded employability skills as essential for their employability. Shah et al. (2004) also found similar findings among students at the Bournemouth University in the UK where students considered employability skills such as communication, self-motivation, personal organisation and teamwork as important for their employability. As illustrated in Table 2, there was a small (0.240) to a large (0.576) relationship between employability skills and perceptions of employability among university students (Pallant, 2013).

Table 2: Correlation matrix

Adaptability skills	Pearson Correlation	1												
	Sig. (2-tailed)													
Analytical & Problem-solving skills	Pearson Correlation	.529**	1											
	Sig. (2-tailed)	.000												
Creative thinking skills	Pearson Correlation	.506**	.352**	1										
	Sig. (2-tailed)	.000	.000											
Human skills	Pearson Correlation	.399**	.370**	.303**	1									
	Sig. (2-tailed)	.000	.000	.000										
English language proficiency skills	Pearson Correlation	.510**	.444**	.323**	.322**	1								
	Sig. (2-tailed)	.000	.000	.000	.000									
ICT skills	Pearson Correlation	.450**	.322**	.281**	.265**	.471**	1							
	Sig. (2-tailed)	.000	.000	.000	.000	.000								
Personal organisation skills	Pearson Correlation	.501**	.407**	.345**	.365**	.352**	.439**	1						
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000							
Leadership skills	Pearson Correlation	.581**	.489**	.375**	.455**	.472**	.396**	.555**	1					
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000						
Oral communication skills	Pearson Correlation	.516**	.438**	.387**	.409**	.518**	.528**	.502**	.642**	1				
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000					
Written communication skills	Pearson Correlation	.377**	.317**	.288**	.200**	.429**	.422**	.386**	.388**	.518**	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000				
Labour market	Pearson Correlation	.480**	.400**	.400**	.324**	.366**	.380**	.396**	.533**	.522**	.433**	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000			
field of study	Pearson Correlation	.358**	.280**	.315**	.240**	.251**	.253**	.402**	.382**	.393**	.324**	.536**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		
Knowledge and skills	Pearson Correlation	.415**	.274**	.308**	.218**	.363**	.338**	.305**	.356**	.380**	.322**	.537**	.576**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Self-confidence	Pearson Correlation	.427**	.381**	.380**	.290**	.350**	.330**	.347**	.459**	.470**	.287**	.527**	.410**	.406**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 (2-tailed)

5. Discussion

In this study, based on the mean scores of employability skills (\bar{x} = 4.63 to 5.25) it appears that university students in South Africa possess employability skills. This is significant because the possession of employability skills is known to enhance employability (Potgieter and Coetzee, 2013) as they assist individuals to get, keep and do well in a job. Further, based on the findings of this study, it is evident that employability skills positively relate to the perceptions of university students regarding their employability. The mean scores of the factors that describe perceived employability (\bar{x} = 4.43 to 4.90) indicate that students are confident of their employability due to them having the required skills. In other words, there is a relationship between the possession of employability skills and perceived employability among university students in South Africa. What is important about this finding is that employability skills make an individual more desirable to prospective employers (Pan and Lee, 2011). Therefore, university students with employability skills are likely to appeal to prospective employers. Current and prospective employers value employability skills (Fugate, Kinicki and Ashforth, 2004) because they raise the productive potential of graduates (Knight and Yorke, 2003). Put differently, organisations consider graduates who will exert some impact on their operations. The world of work is changing and it is imperative that current and future generation of workers should be well trained because their knowledge, skills and positive attitude are essential to cope with the demands of the modern world (Bakar and Hanafi, 2007).

University students with employability attributes stand a better chance of being absorbed by the labour market and, in that way, they will contribute significantly towards economic growth and development (Rothwell, Jewell and Hardie, 2009). From this study, a significant positive relationship among the factors that describe perceived employability is observed. This finding confirms Rothwell et al. (2008) finding that the state of the labour market, the field of study, self-belief, the university attended and ambition make up perceived employability of students. In addition, another factor, knowledge and skills of university students seems to predict the perceptions of university students regarding their employability as it relates significantly with the other three factors. In the context of this study, therefore, this implies that perceived employability is a four-factor structure. The conclusion drawn from this finding is that university students with the appropriate knowledge and skills, acquired from different fields of study, are likely to have

higher self-confidence and, therefore, may influence the state of the labour market.

6. Limitations and directions for future research

Similar to other studies, this study has its own limitations. First, the study used convenience sampling as the institutions were selected based on convenience and accessibility. Therefore, the generalisation of the findings to the greater population of students should be approached with caution. In light of this, future research could broaden the scope and include other institutions. In addition, while the sample size was consistent with similar studies, the views expressed by students in this study may not necessarily represent those of the entire student population in South Africa. In light of this, future research could consider larger sample sizes or different research approaches, which could lead to different outcomes.

7. Recommendations

It is evident that employability skills play a significant role towards the perceptions of university students regarding their employability prospects. Therefore, universities should modify their traditional methods of delivery to the one that is work-based (Christy, Uddin and Ghosh, 2007). Universities should form partnerships with employer organisations in which students are referred to do practical work to improve their employability skills. Furthermore, employers should be invited as guest lecturers to share their knowledge with students and consulted when curricular is designed for different programmes. A further recommendation is that a favourable state of the labour market is required to enhance employability. Therefore, government should create a favourable environment in terms of the regulatory laws to enhance employability of students. For example, government can provide employers with incentives in the form of subsidies or tax concessions to encourage employment of graduates, thereby enhancing their skills. Organisations such as the South African Graduate Development Association (SAGDA) should intensify their programmes as they play a pivotal role in preparing graduates for the world of work.

8. Conclusions

The rapid change in the world of work requires university students with employability skills that will benefit them as future employees and employers

alike. Judging from the findings of this study, university students perceive themselves as possessing employability skills, which influence how they perceive their employability. It, therefore, is essential that there is a continuous investigation of employability of university students.

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