

# WORK-READINESS SKILLS IN THE FASSET SECTOR

## Authors:

Melandi Raftopoulos<sup>1</sup>  
Sanet Coetzee<sup>1</sup>  
Deléne Visser<sup>1</sup>

## Affiliations:

<sup>1</sup>Department of Industrial and Organisational Psychology, University of South Africa, South Africa

## Correspondence to:

Sanet Coetzee

## e-mail:

coetzsc@unisa.ac.za

## Postal address:

Department of Industrial and Organisational Psychology, PO Box 392, UNISA, 0003, South Africa

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## ABSTRACT

The objective of the study was to determine the work-readiness skills that are regarded as important by employers and graduates in the Fasset Sector of South Africa. A cross-sectional survey design was used to achieve this objective. Two convenience samples, namely 24 employers and 333 graduates, completed the Work Readiness Skills Scale. This scale was validated as a one-factor model with an alpha coefficient of 0.88. Oral and written communication, self-discipline, time management, interpersonal skills and teamwork, problem-solving skills and positive work ethic were rated as important skills for securing employment in this sector by employers and graduates alike. In addition, employers valued numeracy skills and motivation, whereas graduates regarded confidence and leadership skills as important. The results have implications for the curriculum design of the Fasset Work Readiness Programme presented to graduates in this industry.

## INTRODUCTION

There is general consensus that the fundamental nature and structure of work, of the economy, of family life and of society are changing globally and will continue to change at an ever-increasing rate (Rojewski & Lasonen, 2004). This change is being sparked by increased competition due to factors such as globalisation, higher demands for financial performance, technology, speed, changing customer needs and a focus on people as a competitive advantage (Nabi, 2003). Fewer employees are therefore expected to have more skills in the turbulent economic environment in which organisations are finding themselves (Dlamini, 2001; Lee, 1994; Nabi, 2003). Globalisation is further urging the workforce to make rapid adjustments in flexibility, to exhibit multi-tasking and even to manifest risk-taking (Coutinho, Dam & Blustein, 2008).

Skills development has taken on a new significance across the globe as nations and companies compete to attract, develop and retain the best and most highly skilled workers. Oosthuizen and Kara (2008) confirmed that employees are critical in creating a competitive advantage and found skills development to be one of the most prominent factors in this regard. This war for talent is also cascading down to the employment of graduates in organisations. In this regard, Nabi (2003) argued that the optimum use of graduate skills enhances the competitiveness of organisations. It is also evident, however, that 'graduates are entering a more flexible, insecure and technology-dependent workplace than ever before' (Smith & Kruger, 2008, p. 123) and therefore need very specific skills required by the workplace in the 21st century. Since moving from an industrial to an information era in the world of work, for example, workers are now required to be able to use logical-abstract thinking to diagnose problems, to research and apply knowledge, to propose solutions and to design and implement those solutions, often as a member of a team (Maclean & Ordóñez, 2007).

Smith and Kruger (2008) proposed that, apart from being skilled, from having the required knowledge in a specific discipline and from having the up-to-date technical skills required in a profession, graduates also need generic skills. Smith and Kruger (2008) adopted the definition of the National Centre for Vocational Education Research for this, which states that generic skills are skills that apply across a variety of job and life contexts. In this regard, Davies (2000) defined transferable skills as the ability to use skills learned in one situation in other situations. Munby, Versnel, Hutchinson, Chin and Berg (2003) suggested a different approach to transferable or generalisable skills. According to them, workplace knowledge and learning are highly contextual and they emphasised that more research should explore which aspects of work are generalisable. They further argued that routines are central to all workplaces and acknowledged that routines are different in different contexts, but emphasised the fact that these remain routines. Raybould and Sheedy (2005) suggested that there are transferable skills or employability skills that refer to the personal abilities of individuals that can be transferred from one position to another and used within any profession in any stage of their careers. Maclean and Ordóñez (2007) also argued that the required skills set for jobs is changing so rapidly that employers are looking more for trainable recruits with generic employability skills sets, such as flexibility, a quickness of learning and persuasive communication and teamwork, rather than recruits trained for specific employment.

Workforce readiness, work-readiness skills, employability skills, workplace know-how, transferable skills and career skills are some of the terms used to describe these generic skills needed by job entrants to be successful in the world of work (O'Neil, Allred & Baker, 1997; Smith & Kruger, 2008; Zinser, 2003). For the purposes of this research, these skills are referred to as 'work-readiness skills'.

## Work-readiness skills

In the past two decades, several studies have been undertaken to determine the set of work-readiness skills required of graduates. Some of the studies that may be useful in identifying a set of work-readiness skills appropriate to graduates in the Fasset Sector in South Africa are given in historical order in the following paragraphs.

Between 1984 and 1991, at least five major studies were conducted in the United States in order to identify and define the basic skills required by job entrants for work readiness across all jobs (O'Neil et

*al.*, 1997). The key underlying concern was to address economic difficulties and the challenge of competing in world markets (O'Neil *et al.*, 1997).

In the late 1980s, Greenwood, Edge and Hodgetts (1987) undertook research over 13 years to identify the skills that managers expect from graduates. Across three studies, the following skills were commonly identified by managers: the ability to communicate; the ability to analyse data, to propose solutions and to make decisions; the ability to plan, to organise and to coordinate; and the ability to work effectively with others.

In Australia, the Mayer Committee of 1992 defined a set key of competencies that were essential in the new workplace (Smith & Comyn, 2004). The National Center for Research on Evaluation, Standards, and Student Testing identified and categorised workforce skills in five major studies (O'Neil *et al.*, 1997). In these studies, experts (who consisted mainly of educators, business people, scholars and policy-makers) were asked to identify the skills necessary in the world of work. O'Neil listed the four categories of skills that were identified by these five studies, which can be summarised as follows:

- Basic academic skills: Basic listening and speaking skills.
- High-order thinking skills: Reasoning, problem-solving, creativity and decision-making skills and the ability to learn.
- Interpersonal and teamwork skills: Negotiation and conflict-resolution skills, leadership skills and the ability to work with others from diverse backgrounds.
- Personal characteristics and attitudes: Self-esteem, motivation and the taking of responsibility for personal actions and growth.

Hughey and Mussnug (1997) pointed out that knowledge-matter experts argue that it is important to teach people how to think, rather than teaching them specific skills. Doncaster (2000, p. 350) agreed with this view because 'learning how to learn rather than simply applying known solutions to problems is becoming an ever-more important ability'. Better decision-making and problem-solving skills help employees to remain employable (Hughey & Mussnug, 1997).

In South Africa, Van Schoor (2000) surveyed 322 organisations and found that they regarded willingness and ability to learn, business skills, interpersonal relations, leadership skills, initiative, integrity and enthusiasm to be the most sought-after skills, values and attitudes of graduates.

More recently, the Business Council of Australia and the Australian Chamber of Commerce and Industry (2002) issued a report aimed at clearly defining the concept of employability and at providing a more widely acceptable list of employability skills (Smith & Comyn, 2004).

Nabi (2003) maintained that graduate employability skills are not universally defined when he considered research conducted in the British context. He regarded graduate employability skills as including traditional academic skills (such as the critical evaluation of evidence, analysis, logical argumentation and problem-solving) as well as the core or key skills that are required by higher institutions (such as communication, numeracy and teamwork).

Basic skills required are associated with personal development and with occupational and information-technology skills and are an element of competitiveness (Addis, 2003). Basic skills, such as reading skills for the understanding of safety instructions, are required in the workplace to function effectively. Basic writing skills have become more important as a result of globalisation (Addis, 2003).

Falconer and Pettigrew (2003) listed self-reliance, self-discipline, the ability to work harmoniously with others and the ability to

apply knowledge to solve practical problems as transferable skills. They argued that these transferable skills should be incorporated into the curricula of university programmes. They furthermore conducted a survey in the financial-services profession in the UK on the range of skills considered important by both graduates and professionals. The list of skills generated from the study (teamwork, oral and written communication, problem-solving, information-handling, negotiation, listening, planning, resourcefulness and innovation) can also be grouped according to the four groups of skills suggested by Greenwood *et al.* (1987).

Zinser (2003) maintained that employability skills include the effective management of resources, communication and interpersonal skills, teamwork and problem-solving skills, and the acquisition and retention of a job.

Birt, Wallis and Winternitz (2004), commenting on the variables considered important to South African talent, emphasised the importance of knowledge workers who are able to solve complex problems with a good understanding of cause-and-effect relationships and who are adaptable to changes within an organisation and environment.

Horn (2006) viewed proficiency in mathematics, computation, reading, writing, the effective use of resources and information, interpersonal skills, the understanding of systems and mastering of technology and flexibility in coping with change in the workplace as the new competencies required in the current knowledge era.

Smith and Kruger (2008) extensively reviewed lists of generic skills and identified seven categories. These categories are basic skills (such as literacy and numeracy), communication skills (such as negotiation and conflict management), management skills (such as planning, organising and decision-making), environmental-awareness skills (such as business awareness), intellectual skills (such as analysis, critical and creative thinking, and problem-solving), self and career-management skills (such as personal drive, resilience and self-awareness) and interpersonal skills (such as teamwork and networking). Clarke (2008) also reviewed the skills set making up the employability of individuals and commented that it is unrealistic to expect everyone to possess all these generic skills. This does, however, highlight the importance of a broad range of personal and transferable skills that facilitates the employment of individuals in the 21st century (Clarke, 2008).

It is clear from the above that there are different views regarding the skills required by graduates. Graduates, however, are challenged to prepare themselves for the world of work and for taking ownership of their careers without having a clear picture of which skills are required in the work environment. This seems like an unfair challenge.

Of particular interest is the argument by Munby *et al.* (2003) that it is easy enough to compile lists of employability and essential skills but that it is quite a different matter to conduct the research needed to determine whether these skills are the actual competencies sought by employers and used in the workplace. It is therefore important that not only is a list of work-readiness skills identified but also that research is conducted to determine the applicability of these skills to the workplace.

Although the South African government is committed to taking concrete steps to raise the skills profile in the labour market (Department of Labour, 2003), there appears to be a lack of academic research in the domain of employability skills to support the much-needed skills-development agenda required for the youth of this country and a lack of research relating to issues of globalisation, knowledge, skills and development (McGrath, 2006). Du Toit (2005) pointed to the lack of research and the application of research evidence to inform policy decisions

in developing countries. She called for more research aimed at identifying the needs of clients in the different sectors that can unearth problems experienced in the transition to employment. She furthermore emphasised the need to determine the major factors that either support or hinder the implementation of successful transition or access to employment (Du Toit, 2005).

### Addressing work-readiness skills development in the Fasset Sector

In South Africa, Sector Education and Training Authorities (SETAs) were established in terms of the Skills Development Act 97 of 1998 (Republic of South Africa, 1998). They are responsible for the development of skills in the various sectors. Fasset is the SETA for finance, accounting, management-consulting and other related financial services. This includes organisations that perform financial-service activities, such as the management of investment entities and trusts, the rendering of company-secretary services, the administration of financial markets, security-dealing, stock-broking, the management of asset portfolios, the management of development organisations, tax, accounting, bookkeeping and auditing services, cost and management accounting, and business and management-consulting services (Fasset, n.d.).

By means of its sector-skills plan, Fasset analyses the demand for and supply of skills to the sector and determines the skills needs and skills-development priorities for the sector. It identified the training of unemployed youth and their absorption into the formal sector as a priority. The aim is to ensure that these people are equipped with the necessary academic and practical skills required in the workplace (Fasset, 2004). As a result, the Fasset Work Readiness Programme was introduced to improve the preparation of graduates, especially of previously disadvantaged graduates, for the world of work. A consortium was awarded the contract to design and execute this Work Readiness Programme.

The 12-week Work Readiness Programme consists of both classroom-based (structured) training and skills-based, on-the-job training. Various modules were designed to equip graduates with the skills required in the workplace. Apart from aspects such as career development, networking and job-seeking strategies, the generic employability skills covered during this course include the following:

- Essential individual skills (such as time management, conflict management and effective oral communication)
- A positive work ethic (such as dress and grooming)
- Business knowledge and skills (such as office practice, effective meeting skills, written business communication, project-management skills and presentation skills)
- Team effectiveness (such as one's role and impact in a team and getting along with others to achieve a common goal)
- Information technology (IT) (such as basic IT skills).

Although work-readiness programmes may benefit graduates in many ways, they are valuable only if they address needs in the workplace. Maclean and Ordonez (2007) substantiated this and argued that, as the world of work changes, education and skills development should change accordingly. In their view, a first step in this process is for a thorough needs analysis to be conducted. It is often more difficult, however, to measure or articulate the mental and social skills that are needed in employment, even though skills such as soundness of analysis, teamwork and the ability to learn are more of a determinant to productivity. Maclean and Ordonez therefore suggested that education or training systems for employability should be demand-driven rather than supply-driven.

The question addressed in this study was therefore whether the Fasset Work Readiness Programme addresses the basic skills that employers require from graduates when they recruit staff for entry-level positions. Because graduates often assume that they have the skills required for the world of work but are

subsequently disillusioned when not appointed, it was also deemed important to investigate the perceptions of graduates regarding the skills that they believe as important for the world of work compared to what employers believe as important.

The objectives of this study were therefore threefold, namely 1) to conceptualise the skills and competencies required from graduates for entry-level positions in the Fasset Sector, 2) to develop a valid and reliable measure to evaluate the perceptions of the importance of work-readiness skills (the Work Readiness Skills Scale) and 3) to determine whether the skills and competencies advanced by means of the Fasset Work Readiness Programme and those regarded as important by graduates are in accordance with the skills and competencies sought by employers in the Fasset Sector.

## RESEARCH DESIGN

### Research approach

A cross-sectional survey design was used. This design is relevant where groups of subjects at various stages of development are studied simultaneously (Shaughnessy & Zechmeister, 1997). In this study, data were collected from the target population by means of questionnaires.

### Research method

#### Research participants

This study required two samples: a sample of companies registered with the Fasset SETA interested in employing graduates, and a sample of unemployed graduates. In terms of the populations from which the samples were drawn and in accordance with the Fasset Sector Profile (Fasset, n.d.), it was estimated that the Fasset Sector consisted of 7 200 organisations, which employed an estimated 92 000 employees (approximately 1% of employment in the formal sector of the South African economy). Almost two thirds of the member organisations in the Fasset Sector employed five or fewer employees and another 30% of the member organisations employed between six and 20 employees (Fasset, n.d.).

It was important to first establish whether employers in the Fasset Sector employed graduates because the study could not take place if this were not the case. Purposeful sampling was therefore used because only employers interested in recruiting graduates from the Fasset Work Readiness Programme would be contacted to participate in the study.

Questionnaires were distributed to employers in the Fasset Sector at the beginning of the Fasset Work Readiness Programme. A total of 68 organisations registered with Fasset indicated interest in recruiting graduates from the Fasset Work Readiness Programme.

These 68 employers were therefore targeted for the purpose of determining their skills requirements for graduates. Among the 26 organisations that responded, 24 of the responses were valid because two of the organisations indicated registration with a SETA other than Fasset. The majority of the 24 organisations (56% or 14 out of the 24) represented the accounting, bookkeeping, auditing and tax services subsector of Fasset. 16% of the organisations were registered as investment entities and trusts and as company-secretary services. None of the organisations were registered with Fasset under the subsector of development organisations or SARS and government organisations. Altogether 45.8% of the 24 organisations had more than 150 employees. 10 of the organisations recruited one to five graduates annually. Six of the organisations recruited more than 51 graduates annually. A further 3 out of the 24 organisations recruited between 21 and 50 graduates annually. The 24 organisations formed the first sample in this study.

The second population studied was that of unemployed graduates who had tertiary qualifications relevant to the Fasset Sector. This

population consisted of the pool of unemployed graduates that was recruited for the purpose of the 2006 Fasset Work Readiness Programme. From this population, a purposeful sample of 333 graduates was drawn. These 333 candidates, who had been successful in the first screening phase and had been invited to attend interviews, were all asked to complete questionnaires. The mean age of the graduates was 24.13, with the youngest respondent being 20 and the oldest respondent being 34. A substantial percentage of the graduates (48.9% or 163 of the 333) indicated work experience due to part-time work, whereas 43% of the graduates indicated no work experience at all. Only 5.4% of the graduates (18 of the 333) had been employed in a full-time position in the past. The majority of the graduates (66.6% or 222 of the 333) had obtained their qualifications the previous year.

Informed consent was obtained from all the participants by means of their signature on a letter that explained the purpose of the study. Participation was voluntary and the respondents had the right to withdraw at any stage.

### Measuring instrument

Two questionnaires were designed to obtain the information necessary for the research:

- One questionnaire targeted organisations that had registered with Fasset and that had indicated that they employ graduates. The goal of the questionnaire was to determine the work-readiness skills that these organisations regarded as important.
- A parallel questionnaire targeted the unemployed graduates who had participated in the 2006 Fasset Work Readiness Programme and aimed to determine the work-readiness skills that these graduates regarded as important.

The questionnaires were developed with the assistance of subject-matter experts. Opinions were obtained from a statistician, from experts in the field of academic development and from the developers of the Work Readiness Programme. The steps followed in the construction of the questionnaires were a combination of the steps proposed by De Vos, Strydom, Fouché and Delpont (2002), Terre Blanche and Durrheim (2004) and Fink (2006).

A list of work-readiness skills was drafted from the literature. Three groups of work-readiness skills were identified based on a qualitative analysis of available literature, namely academic/technical skills, basic/generic/transferable skills and work experience. The questions in the questionnaires were structured around these three categories of skills.

The first section of this Work Readiness Skills Scale requested the respondents to provide biographical information. The questionnaire was accompanied by a covering letter that included the following information: the purpose of the research (motivating the respondent to participate); a guarantee of confidentiality; the contact details of the researcher; instructions for completing the questionnaire; and an offer to send the respondent a summary of the research findings as suggested by Fink (2006).

The second section of the Work Readiness Skills Scale consisted of 35 questions and statements related to work readiness. The contents of the items addressed to the organisations and to the graduates were identical, except that, in the case of the organisations, the items referred to the organisation involved. The respondents were asked to indicate their answers by marking crosses in the appropriate boxes. For the first 10 questions, the respondents had to choose between the following six options: 'totally disagree'; 'disagree to a large extent'; 'slightly disagree'; 'slightly agree'; 'agree to a large extent'; and 'totally agree'. For questions 11 to 35, the respondents had to choose between the following five options: 'not at all'; 'to a slight extent'; 'to a moderate extent'; 'to a large extent'; and 'completely'.

The third section of the Work Readiness Skills Scale requested the respondents to rank the three categories of skills or competencies – 'academic/technical skills', 'basic/generic/transferable skills' and 'work experience' – on a three-point scale by indicating '1' next to the most important category of skill or competency, '2' next to the second-most important and '3' next to the third-most important. For the final set of items, the respondents were instructed to select the 10 most important skills or competencies from a list of 22. The list containing these work-readiness skills had originally been drafted from the literature. The respondents then had to rank their own selection of 10 skills on a scale from 1 to 10, where 10 indicated the most important and 1 the least important.

The internal validity of the scale was ensured through face validity and content validity. To enhance internal validity, the questionnaires were also pilot-tested. This was done to ensure that the questions reflected the theoretical content of the domain, that the questions were clear and concise and that errors were rectified (De Vos *et al.*, 2002). The questionnaires were finalised after feedback had been received from the respondents of the pilot study. Construct validity and the reliability of the scale were determined through exploratory factor analysis and Cronbach alpha coefficients.

### Research procedure

The questionnaire for the unemployed graduates was administered in groups, which saved cost and time. All the respondents were exposed to the same conditions while completing the questionnaire. The questionnaire for the organisations was self-administered because it was emailed. Each organisation's HR consultant responsible for graduate recruitment and selection was telephoned before the questionnaire was emailed to explain the importance of the research and to encourage participation. Email reminders were sent to the respondents to encourage them to complete the questionnaire.

## RESULTS

### Work Readiness Skills Scale

The first step of the analyses entailed examining the psychometric properties of the Work Readiness Skills Scale. This step involved determining the dimensionality of the questionnaire by means of exploratory factor analysis and by estimating its internal consistency reliability. The item results of the 35-item scale administered to the 333 graduates were used for this purpose.

To determine the suitability of the data for exploratory factor analysis, several initial diagnostic procedures were carried out. Firstly, the skewness and kurtosis of the individual items were examined with the purpose of eliminating items with high skewness and kurtosis. Items 4, 8 and 18 were eliminated from the subsequent factor analysis because their skewness and kurtosis values exceeded the absolute values of 2 and 5, respectively.

Secondly, diagnostic tests were performed to ascertain whether the intercorrelation matrix contained an adequate number of substantial pairwise correlations and low partial correlations to justify the factor analysis. Three of the items, namely Items 1, 2 and 3, yielded measures of sampling adequacy (MSAs) smaller than 0.60. These items were therefore dropped from subsequent analyses.

Thirdly, a principal-axis factor analysis was conducted on the intercorrelations of the remaining items and the communalities obtained were examined. Only Item 6 yielded a communality smaller than 0.20. After dropping Item 6, the Kaiser Meyer-Olkin MSA was equal to 0.88.

The above results provided sufficient justification to proceed with a factor analysis on the remaining 28 items. Eight factors accounting for 57.09% of the variance were extracted by means of the principal-axis factoring technique. The resulting factor

**TABLE 1**  
Factor-pattern matrix for the 28-item work readiness skills scale

ITEM	FACTOR								h <sup>2</sup>
	1	2	3	4	5	6	7	8	
-	-	-	-	-	-	-	-	-	-
31	<b>0.73</b>	-	-	-	-	-	-	-	0.62
30	<b>0.72</b>	-	-0.16	-	-	-0.10	-	0.13	0.65
35	<b>0.65</b>	-	0.10	-	-	-	-	-0.11	0.53
21	0.22	-	0.17	-	-	-	0.16	0.17	0.25
23	-	<b>0.94</b>	-0.13	-	-	-	-	-0.11	0.76
22	-	<b>0.57</b>	-	-	-	-	-	-	0.37
24	-	<b>0.47</b>	-	-	-	-	-	-	0.31
19	0.16	<b>0.36</b>	0.22	-	-0.13	-	-	-	0.36
16	-	-	<b>0.58</b>	-	-	-	-	-	0.39
34	0.24	-	<b>0.35</b>	-	-	-	-	0.12	0.24
10	-	-	-	<b>0.56</b>	-	-	-	-	0.33
9	0.20	-	0.24	<b>0.50</b>	0.12	-0.15	-	<b>-0.30</b>	0.53
7	-	0.19	-0.12	<b>0.33</b>	-	-	-	0.12	0.21
27	0.18	-	-0.14	-	<b>-0.58</b>	-	0.21	-	0.58
26	0.10	-	-	0.11	<b>-0.52</b>	-	0.23	-	0.50
17	0.12	-	-	-	<b>-0.46</b>	-0.20	-	-	0.43
14	-	-	0.10	-	<b>-0.38</b>	<b>-0.33</b>	-0.13	-	0.42
20	0.23	0.18	0.26	-	-0.26	-	-	-	0.40
15	-0.13	0.13	0.22	-	-0.26	-	-	0.14	0.25
11	-	-	-	-	-	<b>-0.76</b>	-	-	0.53
12	-	-	0.10	-	-	<b>-0.52</b>	-	-	0.36
13	0.16	-	-	-	-0.14	<b>-0.45</b>	0.24	-0.14	0.49
5	-	-	-	0.18	-0.13	-0.24	-	-0.16	0.22
33	-	-	-	-	-	-	<b>0.46</b>	-	0.24
28	0.29	-	-	-	-0.13	-	<b>0.38</b>	-	0.44
32	0.20	-	-	-	-	-0.11	-	<b>0.37</b>	0.26
25	-	-	-	0.12	-0.14	-0.12	0.16	<b>0.31</b>	0.28
29	0.18	0.12	-	0.15	-	-0.11	0.19	0.22	0.32

Factor loadings smaller than 0.10 were omitted and factor loadings larger than 0.30 are in bold typeset

**TABLE 2**  
Factor matrix of the second factor analysis

SCALES DEFINED BY FACTORS OF INITIAL FACTOR ANALYSIS	FACTOR LOADINGS	h <sup>2</sup>
Scale 5 (Items 26, 27, 17, 14, 20, 15)	0.78	0.62
Scale 1 (Items 30, 31, 35, 21)	0.70	0.48
Scale 3 (Items 16, 34)	0.63	0.40
Scale 6 (Items 11, 12, 13, 5)	0.62	0.38
Scale 8 (Items 32, 25, 29)	0.62	0.38
Scale 7 (Items 33, 28)	0.52	0.27
Scale 2 (Items 22, 23, 24, 19)	0.50	0.25
Scale 4 (Items 7, 9, 10)	0.48	0.23

matrix was rotated to a simple structure using the direct oblimin rotation procedure. The rotated factor-pattern matrix, which includes the communalities associated with the scales, is presented in Table 1. The variables were ordered and grouped by size of loading to facilitate interpretation.

A second factor analysis to further reduce the number of latent variables was prompted by the multitude of factors, the small number of items per factor, the fact that some factors were not adequately determined and the intercorrelations of the factors. The input for this factor analysis was the individuals' scores on scales formed by combining the items into scales according to the magnitude of the factor loadings. The process entailed allocating every item to a single subscale, namely the subscale for which it

had its largest factor loading. Eight scores per individual were thus intercorrelated and served as the input for the second factor analysis. A single factor explaining 45.05% of the variance was extracted. The factor loadings and communalities are reported in Table 2. The authors decided to proceed with the single-factor solution for the Work Readiness Skills Scale. The Cronbach alpha computed for the 28-item scale was equal to 0.88 (see Table 3).

In order to compare the perceptions regarding the importance of work-readiness skills between the graduate and organisational groups, the difference between the means of the two groups was tested for statistical significance by means of an independent samples t-test. Table 3 presents the descriptive statistics for the groups. The graduate group regarded the skills described in the Work Readiness Skills Scale as significantly more important than the group of HR consultants representing the 24 organisations ( $t(357) = 4.80, p < 0.001$ ). The difference was associated with a large effect size ( $d = 0.806$ ).

**Ranking of the categories of skills**

In the second section of the questionnaire, the graduates and organisations were asked to rank the three categories of skills or competencies from 1 to 3, according to what they perceived to be the first, second and third-most important skill or competency for graduates. The means and standard deviations of the ratings by the graduates and organisations are presented in Table 4. A lower mean indicates higher importance.

**TABLE 3**  
Scale descriptives for the 28-item Work Readiness Skills Scale and comparison between means of graduates and organisations

	N	M	SD	SE (mean)	SKEWNESS	KURTOSIS	CRONBACH ALPHA
Graduates	333	120.52	11.26	0.62	-0.48	0.38	0.88
Organisations	24	108.88	14.43	2.95			

  

LEVENE'S TEST FOR EQUALITY OF VARIANCES		T-TEST FOR EQUALITY OF MEANS				
F	p	t	Df	p (2-tailed)	95% confidence interval of the difference	
					Lower	Upper
0.35	0.55	4.80	357	0.000	6.87	16.42

**TABLE 4**  
Rating of categories of skills/competencies

CATEGORY OF SKILLS/COMPETENCY	GRADUATES			ORGANISATIONS		
	N	M	SD	N	M	SD
Academic and technical skills (i.e. skills obtained during studies)	294	1.72	0.76	20	1.30	0.57
Basic/generic/transferable skills (communication skills, personality characteristics, interpersonal skills and teamwork, occupational skills, IT skills, effective management of resources, time-management skills, world and local awareness)	294	1.83	0.77	20	1.80	0.52
Work experience	293	2.45	0.73	20	2.90	0.31

**TABLE 5**  
Descriptive statistics and ranking of skills/competencies by graduates

SKILL/COMPETENCY	N	M	SD	NxM	Rank
*Oral communication	228	5.80	3.03	1322.40	1
*Self-discipline	222	5.80	2.72	1287.60	2
Confidence	200	5.48	2.63	1096.00	3
*Time management	221	4.32	2.70	954.72	4
*Interpersonal skills and teamwork	199	4.38	2.78	871.62	5
*Written communication	162	5.19	2.68	840.78	6
*Problem-solving skills	190	3.76	2.69	714.40	7
*Positive work ethic	153	4.37	2.81	668.61	8
Leadership	138	4.68	2.76	645.84	9
Decision-making skills	160	3.94	2.67	630.40	10
Motivation	131	4.54	2.65	594.74	11
Adaptability	121	4.37	2.65	528.77	12
Innovation	74	3.78	2.96	479.72	13
IT skills	122	3.83	2.93	467.26	14
Negotiation skills	102	4.31	2.81	439.62	15
Mature attitude	92	4.67	2.88	429.64	16
Numeracy skills	109	3.31	2.79	360.79	17
Self-development	92	3.89	2.44	357.88	18
Self-reliance	66	4.76	2.54	314.16	19
Awareness of how changes in the world impact on the organisation	86	2.67	2.92	229.62	20
Occupation skills (job-search strategies)	50	4.54	3.25	227.00	21
Effective management of resources	59	2.63	2.41	155.17	22

\* Skill/competency overlaps with those among top 10 listed in Table 6

**TABLE 6**  
Descriptive statistics and ranking of skills/competencies by organisations

SKILL/COMPETENCY	N	M	SD	NxM	Rank
*Oral communication	13	6.62	2.76	86.06	1
Numeracy skills	12	7.00	2.80	84.00	2
*Positive work ethic	13	5.54	2.44	72.02	3
*Interpersonal skills and teamwork	15	4.73	2.28	70.95	4
*Self-discipline	11	5.18	2.68	56.98	5
*Problem-solving skills	9	5.33	2.96	47.97	6
Motivation	9	5.22	2.49	46.98	7
*Time management	13	3.54	2.70	46.02	8
*Written communication	12	3.17	2.33	38.04	9
Mature attitude	5	7.60	0.89	38.00	10
IT skills	11	2.82	2.27	31.02	11
Confidence	7	4.00	3.51	28.00	12
Adaptability	8	2.87	2.42	22.96	13
Self-development	5	4.40	1.82	22.00	14
Leadership	5	3.40	3.51	17.00	15
Effective management of resources	7	1.86	2.11	13.02	16
Occupation skills (job-search strategies)	2	6.50	3.54	13.00	17
Decision-making skills	4	3.25	1.71	13.00	18
Self-reliance	4	2.75	2.75	11.00	19
Innovation	1	7.00	-	7.00	20
Negotiation skills	1	4.00	-	4.00	21
Awareness of how changes in the world impact on the organisation	2	0.50	0.71	1.00	22

\* Skill/competency overlaps with those among top 10 listed in Table 5

The results indicate that both groups rated the categories of skills or competencies in the following order of importance:

- Academic/technical skills
- Basic/generic/transferable skills
- Work experience

The employers of graduates in the Fasset Sector and the graduates themselves therefore regarded their academic and technical skills as the most important category of skills required of graduates in the world of work. Both groups viewed generic skills to be more important than work experience.

### Ranking of 22 skills or competencies

In the final section of the questionnaire, the respondents were requested to rank the 10 most important skills in order of importance from a list of 22 specific skills. They were requested to select the 10 most important skills from the list and thereafter to rank these so that a score of 10 indicated the most important skill and a score of 1 the least important skill among the 10 skills. In order to obtain a measure of how important each of the 22 skills was regarded by the respondents, the mean ranking per skill was multiplied by the number of individuals who rated that particular skill (NxM). The highest NxM score was therefore

the highest ranking skill (indicated by a rank of 1), the second-highest NxM score indicated the second-highest ranking skill and so forth. The results of the rankings by the graduates are presented in Table 5 and the results for the organisations are presented in Table 6. The NxM scores of skills not among the final top 10 skills are also included in the tables.

Both the graduates and organisations regarded oral communication as the most important work-readiness skill for new employees. Altogether seven of the 10 top ranking skills was shared by the graduates and organisations alike, indicating a fair degree of consensus between the two groups. Apart from oral communication, these skills were self-discipline, interpersonal skills and teamwork, positive work ethic, time management, problem-solving skills and written communication. Numeracy skills were rated second-most important by the organisations, whereas these skills were placed in the seventeenth position by the graduates.

Seven of the 22 work-readiness skills that were originally drafted from literature were directly addressed by the Fasset Work Readiness Programme and five of these were included among the top 10 rankings by the graduates and organisations. These were oral communication, interpersonal skills and teamwork, positive work ethic, time management and written communication.

## DISCUSSION

The objectives of this study were threefold: To conceptualise the skills and competencies required from graduates for entry-level positions in the Fasset Sector; to develop a valid and reliable measure to evaluate the perceptions of the importance of work-readiness skills; and to determine whether the skills and competencies advanced by means of the Fasset Work Readiness Programme and those regarded as important by the graduates are in accordance with the skills and competencies sought by employers in the Fasset Sector.

The Work Readiness Skills Scale developed for the purposes of this research was validated as a one-factor model with an acceptable internal reliability of 0.88. According to the guidelines of Nunnally and Bernstein (1994), this can be seen as acceptable internal reliability. It was therefore a valid and reliable indicator of the work-readiness skills regarded as important by both employers and graduates in the Fasset Sector in South Africa.

Taylor (2005) surveyed 128 youths and 33 employers in the building and construction industry in Australia employing these youths regarding the most important skills for employability. She found that it was generally attitudinal attributes rather than skills proficiency that employers looked for. Maclean and Ordonez (2007) also stated that trainable recruits with generic employability skills are more sought after than trained recruits with specific employment skills. Contrary to these findings, however, both the employers and the graduates in the current study regarded academic and technical skills as more important than generic or transferable skills in graduate applications. This result is in contrast with the recent practice of leading firms, such as Goldman and Sachs, where flexibility, trainability, persuasive communication and teamwork are regarded as more important than accounting or mathematics skills (Maclean & Ordonez, 2007).

A significant difference was also found in terms of the statement 'Only graduates with a degree will be employed in entry level positions'. The organisations valued this statement more than the graduates. It thus appears that the organisations are more inclined to recruit people who have completed a degree. This suggests that the type of academic qualifications and degree of field-specific technical skills may still be a key determining factor for employment in the Fasset Sector in South Africa, despite the international trend of emphasising generic skills in selection and providing in-house training programmes to address technical skills once a person is employed. This result is in line with research conducted in South Africa by Moleke

(2005) and Morrow, Panday and Richter (2005), which indicated that having a degree secures work more successfully than not having a degree and that more education results in securing employment sooner. Both the employers and the graduates nevertheless still regarded transferable skills as more important than work experience.

A practically significant difference of large effect was found between the overall ratings of the employers and the graduates regarding the work-readiness skills presented to them in the scale. The graduates rated the various skills as more important than the employers did. It appears that the graduates were less able to discriminate among the 22 skills presented to them and rated more of them as important skills than the employers did. This confirms the expectation that graduates are not always aware of what is expected from them by potential employers. It also confirms the research by Smith and Kruger (2008), which indicated a clear discrepancy between the expectations of graduates and those of employers regarding the skills needed for employment.

When comparing the work-readiness skills identified in earlier studies and the prominent skills identified by this research, it is clear that some of the common work-readiness skills as identified by Addis (2003), such as personal development (which includes mature attitude and motivation), were confirmed by this research. Some of the work-readiness skills (such as effective communication and working effectively with others) identified by Greenwood *et al.* (1987), were also highlighted by this research. Not only was self-discipline rated by the organisations and graduates as one of the 10 most important work-readiness skills but Falconer and Pettigrew (2003) also identified this skill as an important basic or transferable skill. Some of the top 10 work-readiness skills rated by the organisations and graduates that are in line with the research by Zinser (2003) on employability skills include effective communication skills, interpersonal skills and effective teamwork. Teamwork and effective oral and written communication are also two of the work-readiness skills identified by Falconer and Pettigrew with specific reference to the financial-services profession.

It appears from the results of the research that workplace knowledge and learning are not highly contextual, as argued by Munby *et al.* (2003), and that there are common work-readiness skills that are relevant across different jobs. The research also shows that adaptability, which is an important skill for South African talent according to Birt *et al.* (2004), was not identified by the organisations or graduates as one of the 10 most important work-readiness skills.

Since a sample of convenience was used in this research, findings cannot be generalised to all organisations within the Fasset Sector. Based on the results of this study, however, it appears that both employers and graduates may value the following skills as part of a work-readiness programme: self-discipline; confidence; leadership; numeracy skills; and problem-solving skills. It may therefore increase credibility and success in terms of the placement of learners for the Fasset Work Readiness Programme if more emphasis is placed on the above-mentioned skills and competencies. It is also recommended, in line with the recommendation by Maclean and Ordonez (2007), that the developers of the Fasset Work Readiness Programme determine need and demand from a broader sample of employers in the industry to inform their curriculum. If graduates are better informed regarding the skills that employers in the Fasset Sector value, they will be better able to develop their own work-readiness skills and be more prepared for employment in this particular industry.

Work-readiness programmes can be successful only if they meet the needs of the industry and it is therefore essential that continued research be conducted to determine the needs of the industry. Follow-up research could also be conducted to

determine the effectiveness of the Work Readiness Programme. In this regard, the employment rate of graduates from this programme could be compared to that of other graduates who are also employed in the Fasset Sector but who did not attend the programme. Once employed, the job performance of graduates from the Work Readiness Programme could also be monitored and compared to other recently employed graduates.

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