Research Article

Work Readiness across Various Specializations

Dr. Roberta Fenech

Dr. Priya Baguant

Ihab Abdelwahed

Higher Colleges of Technology,
United Arab Emirates

DOI: https://doi.org/10.36941/ajis-2020-0064

Abstract

The employability of locals in the United Arab Emirates is a national priority and an integral part of Emiratisation, which is an affirmative action policy of the United Arab Emirates Government that promotes preferential hiring status to Emiratis. The latter safeguards national identity, economic sustainability, and political stability (Modarress, Ansari and Lockwood, 2013). The purpose of this research is to study the work readiness of Emirati graduating students across various specializations. The theoretical framework for this study is the four-factor model by Caballero, Walker and Fuller-Tyszkiewicz (2011). The four factors are personal work characteristics, organizational acumen, work competence and social intelligence. The research conducted so far on work readiness of graduates has been limited to particular disciplines (Walker, Storey, Costa, Leung, 2015; Dermott, 2007; Jollands, Jolly and Molyneaux, 2012; Haigh, Ell and Mackisack, 2013; Dermott and Ortiz, 2017). This study contributes to the existing body of knowledge as it does not focus on a single specialization and takes a broad exploratory look at work readiness across five specializations, namely business, information technology, health sciences, applied communication and engineering. 302 graduating Emirati students chosen randomly from various disciplines in different institutions participated in this quantitative research study by filling in a 60-item work readiness questionnaire. The main findings of this study is that specializations in tertiary education vary not only in terms of curriculum, technical knowledge, skills and abilities taught, but also in the preparation for employment which influences the perceptions of graduating students of their work readiness; graduating students in a health specialization perceiving to be the most work ready and graduating students in a business specialization perceiving to be the least work ready.

Keywords: *Work readiness; tertiary education; Emiratization; Work readiness scale*

1. Introduction

One of the challenges facing the tertiary sector in the provision of graduates is that of work readiness. Work readiness of graduates is the extent to which graduates are perceived to have the required skills and attributes to be successful at work in terms of performance and career advancement (Caballero and Walker, 2010). Whilst graduates graduating from full-time tertiary education programs are not expected to have work related experience, they are expected to have a number of skills that are discipline specific and attributes that are not discipline specific (Caballero and Walker, 2010). Bridgestock (2009) also adds personal traits and dispositions that help successful development and

skill application.

The purpose of this research is to study the work readiness of Emirati graduating students across various specializations. The null hypothesis is that there is no statistically significant difference in work readiness across different specializations at tertiary education. The alternative hypothesis is that there is a significant and strong difference in work readiness across different specializations.

The employability of locals in the United Arab Emirates is a national priority and an integral part of Emiratisation, which is an affirmative action policy of the United Arab Emirates Government that promotes preferential hiring status to Emiratis. Emiratisation safeguards national identity, economic sustainability, and political stability (Modarress, Ansari and Lockwood, 2013). Writing on Emiratisation, Forstenlechner, Madi, Selim and Rutledge (2012) add that the policy also addresses the role of educational institutions in the alignment of skills taught in institutions with the needs of the labour market. This study addresses the alignment between tertiary education and the needs of the labour market across a business, health, applied communication, information technology and engineering specialization.

Prikshat, Nankervis, Priyono, Salleh, Connell, and Burgess (2018) in a study carried out in Malaysia, Indonesia and Australia conclude that the challenges associated with work readiness are varied and include: poor industry training; unrealistic graduate expectations; inadequate student internships; unclear skill expectations; lack of linkage between higher education institutions and industry. On work readiness challenges of employers experienced in the UAE, Forstenlechner, Madi, Selim and Rutledge (2012) found that the employer perceptions of the average Emirati's motivation had the largest effect on reducing the employers' willingness to recruit amongst nationals in the UAE.

Differently this study does not investigate the perceptions of the employers in the UAE however explores work readiness from the perception of the Emirati graduating students who will soon enter the workforce. In doing so a four-factor model theoretical framework is adopted that is described in the next section.

2. Literature Review

2.1 Theoretical framework

This study is informed by the four-factor model by Caballero, Walker and Fuller-Tyszkiewicz (2011). The four factors are: personal work characteristics; organizational acumen; work competence; social intelligence. Caballero, Walker and Fuller-Tyszkiewicz (2011) state that "work readiness is a concept believed to be applicable to all types of graduates, however differences in scoring and the manner in which scores are interpreted could be expected for different occupational groups and/or work contexts" (p.52).

Resilience, flexibility, stress management, adaptability and personal development (Caballero, Walker and Fuller-Tyszkiewicz, 2011; Walker, Yong, Pang, Fullarton, Costa and Dunning, 2012) are elements that are sought out by employers assessing the work readiness of new employees. These elements form part of the personal work characteristics factor which is a factor that indicate an ability to cope with workplace demands and unpredictability (Walker, Yong, Pang, Fullarton, Costa and Dunning, 2012).

Social skills, such as team work, awareness of others, conflict management and negotiation skills, are the skills that form part of the social intelligence factor. Work readiness also entails the readiness to work with others and this factor of social intelligence is important in representing adaptability to others and collaboration (Caballero, Walker and Fuller-Tyszkiewicz, 2011).

The knowledge and technical skills acquired within tertiary education institutions are expected of tertiary education graduates and employers have high expectations of the work competence factor comprising technical skills and knowledge (Walker, Yong, Pang, Fullarton, Costa and Dunning, 2012). Caballero, Walker and Fuller-Tyszkiewicz (2011) also add creativity and innovation that are very much sought after by employers in today's world of work. Similarly, organizational acumen also entails the

following: specific work related knowledge; maturity and professional development; work ethics; social responsibility; motivation; and global knowledge (Caballero, Walker and Fuller-Tyszkiewicz, 2011; Walker, Yong, Pang, Fullarton, Costa and Dunning, 2012).

2.2 Workforce readiness across various specializations

Research carried out so far shows that across various specializations (such as nursing, teaching, engineering and business) the understanding of work readiness is not restricted to knowledge of a subject but also extends to relationships, personal qualities and other traits such as innovation and creativity. The latter are covered by four factors in the four factor model by Caballero, Walker and Fuller-Tyszkiewicz (2011).

Dermott and Ortiz (2017) carried out a research on the work readiness of specifically business graduates. According to their findings employers place emphasis on: communication and soft skills such as attentive listening and awareness of audience; work initiative; collaboration; write persuasively, possess critical thinking and problem-solving skills, and be able to manage time effectively. The findings of this study indicate that employers give importance to a mix of social intelligence (communication and soft skills such as attentive listening and awareness of audience), work competence (write persuasively, possess critical thinking and problem-solving skills, and be able to manage time effectively) and organizational acumen (collaboration); whilst not placing much emphasis on personal work characteristics such as resilience, flexibility, stress management, adaptability and confidence.

Walker, Storey, Costa, Leung (2015) on the other hand focused on the work readiness of nurses. Findings are indicative of the fact that work readiness is not solely a matter of technical and clinical competence however also extends to a collection of skills, knowledge, and attitudes that are exhibited in practice. Walker, Storey, Costa, Leung (2015) place emphasis on social intelligence (graduate nurses need skills in relation to teamwork), interpersonal communication, change, and conflict management. Graduate nurses are concerned about feeling inadequately prepared for their graduate year and lack both experience and confidence within the clinical environment. Whilst experience helps in the achievement of work competence and organizational acumen, confidence is a personal work characteristic.

Haigh, Ell and Mackisack (2013) studied the judgements made in relation to the work readiness of teachers. Six dimensions emerged when analyzing the basis on which judgements are made of teacher work readiness. These six dimensions are: relationships; personal qualities; engagement in learning; enacting teaching and managing learning; assessment and use of evidence; knowledge and planning. These six dimensions overlap with the four factors of personal work characteristics, social intelligences, organizational acumen and work competence.

Jollands, Jolly and Molyneaux, (2012) in a study with recent graduates in engineering and their managers found that graduates place emphasis on the importance **of:** project management (work competence); problem solving (work competence); project management skills (work competence); time management (work competence); confidence (personal work characteristic); communication skills (social intelligence); and systems thinking (work competence). On the other hand, managers identified skill gaps in**:** problem solving (work competence); report-writing skills (work competence); and the ability to identify ethical implications of projects (organizational acumen). Both graduates and managers identified the skills gap in ethics (organizational acumen). Results show that although a lot of emphasis is placed on the work competence elements of work readiness there is also importance being given to other elements belonging to the factors of social intelligence, organizational acumen and personal work characteristics.

2.3 Research contributions

As described above, the research conducted so far on work readiness of graduates has been limited to

particular disciplines, such as nursing (Walker, Storey, Costa, Leung, 2015), engineering (Dermott, 2007; Jollands, Jolly and Molyneaux, 2012), teaching (Haigh, Ell and Mackisack, 2013) and business (Dermott and Ortiz, 2017). This study contributes to the existing body of knowledge as it does not focus on a single specialization and takes a broad exploratory look at work readiness across five specializations (informational technology, applied communication, business, engineering and health) that are offered at tertiary education level.

Another contribution is that this study is set within the context of the UAE and aims to investigate the work readiness of Emirati graduating students across various specializations from the perspective of the graduating students themselves. Work readiness in the UAE is an important contributor towards the government policy of Emiratization. Therefore this study also contributes to the already existing body of knowledge on how Emiratization, which seeks to overcome all existing barriers to Emirati employment, may be better achieved.

3. Methodology

The methodology chosen for this study is the quantitative research methodology since researching work readiness across a number of specializations is best done using questionnaires and having a large sample of respondents. Quantitative research is also valuable in testing and validating theory (Wheeldon and Ahlberg, 2012) which for the purpose of this study is the four-factor model by Caballero, Walker and Fuller-Tyszkiewicz (2011). The sample for this quantitative research study are 302 graduating Emirati students chosen randomly from various disciplines and higher education institutions who are currently in the final year of their first degree.

The current investigation utilizes the work readiness scale (WRS) developed by Caballero, Walker and Fuller-Tyszkiewicz (2011) and also validated by Walker, Storey, Costa and Leung (2015). Both a paper based and online version were utilized in ensuring that as many students as possible would fill in the 60 item questionnaire. The 60 item questionnaire comprised 13 items on Personal Work Characteristics, 12 items on Social Intelligence, 20 items on Organizational Acumen and 15 items on Work Competence. Items were scored on a Likert scale from 0 to 10. Full disagreement with the item was marked 0 whilst full agreement was marked as a 10.

Graduating students across various institutions were approached and asked to fill in an anonymous questionnaire following a brief explanation of the study. The total of 302 participants may be sub-divided **into: 30** participants reading for a tertiary qualification in health; 31 participants reading for a tertiary qualification in applied communication; 72 participants reading for a tertiary qualification in engineering; 51 participants reading for a tertiary qualification in information technology; and 90 reading for a tertiary qualification in business.

4. Findings and Analysis

4.1 Analysis

The Work Readiness Scale (Caballero, Walker and Fuller-Tyszkiewicz, 2011) on which the questionnaire for this study was based, was measured against a Likert Scale from 0 to 10. The number 0 signifying the lowest possible perception of work readiness on the 60-item questionnaire and the number 10 signifying the highest possible perception of work readiness. The overall score of work readiness resulting from this study is of 7.09. Therefore, overall Emirati students in their final years of study perceive themselves to be overall work ready.

Table 1 shows the positive, significant and strong correlation, at 95% level of confidence, between the individual factors of the four factor model as well as, between each and every factor and the overall work readiness. Findings show that overall work readiness is positively and strongly correlated to work competence (93%), personal work characteristics (80%), organisational acumen (92%) and social intelligence (92%). There is also a significant, positive and strong correlation

between organisational acumen and work competence (91.5%), social intelligence and work competence (81%), organisational acumen and social intelligence (79%) and personal work characteristics and work competence (69%).

Table 1: The four-factor model: positive and significant correlations

	Work Competence	Social intelligence	Organisational Acumen	PWC	Overall Work Readiness
Work Competence	1.000				
Social Intelligence	.814	1.000			
Organisational Acumen	.915	.790	1.000		
Personal Work Characteristics	.605	.678	.601	1.000	
Overall Work Readiness	.931	.922	.922	.804	1.000

4.2 Results

The purpose of this research is to study the work readiness across various specializations and for this reason results of the data analyzed on the four factors of personal work characteristics, work competence, social intelligence and organizational acumen will be presented in this section by specialization. A common result across all five specializations (business specialization, health specialization, applied communication specialization and engineering specialization) is that students score the lowest on personal work characteristics and score the highest on the factor of organizational acumen. Whilst personal work characteristics embraces skills and abilities related to one's personal development (such as stress management, confidence and efficacy), organizational acumen includes specific work related knowledge, maturity and professional development (Walker, Yong, Pang, Fullarton, Costa and Dunning, 2012).

Results show that the null hypothesis that there is no statistically significant difference in work readiness across different specializations at tertiary education is rejected and the alternative hypothesis that there is a significant and strong difference in work readiness across different specializations is accepted. The findings on work readiness for each of the five specializations are given below.

30 participants filled in the questionnaire from health sciences and their average age is 22. Health is the specialization with the highest overall work readiness score of 7.66. The average scores on all four factors in order of perceived strength by respondents are: organizational acumen (7.88); work competence (7.86); social intelligence (7.61); personal work competencies (7.30).

The specialization with the second highest score on work readiness is applied communication, with 31 participants whose average age is 21. The overall score of work readiness for this specialization is of 7.25. This specialization's students' average scores for organizational acumen is 7.55, for work competences it is 7.44, 7.24 for social intelligence and lastly 6.79 for personal work characteristics.

The overall work readiness score of students in the engineering specialization is of 6.19. 72 engineering students filled in the questionnaire and their average age is of 20. Students in this specialization scored an average score of 7.35 for organizational acumen, an average score of 7.18 for work competence, an average score of 6.90 for social intelligence and an average score of 6.51 for personal work characteristics.

90 participants were from the business specialization and have an average age of 23. Students in the business specialization have an overall work readiness score of 6.81. The average scores on all four factors are: organizational acumen (7.17); work competence (7.09); social intelligence (6.62); personal work characteristics (6.36).

Finally, 51 participants from the information technology specialization filled in the questionnaire and their average age is 22. The information technology specialization has an overall work readiness score of 6.75. The average scores on all four factors are: organizational acumen (7.18);

work competence (7.03); social intelligence (6.69); personal work characteristics (6.09).

4.3 Discussion and Conclusion

Results of this study show that specializations matter when studying the work readiness of graduates because there is a significant and strong difference in work readiness across different specializations. Work readiness is a complex concept that is multi-dimensional as shown in the findings on the correlations between the four factors as well as the correlations between each and every factor and the overall work readiness. Work readiness is also not a catch-all concept and needs to be studied within specific specializations. What follows is a discussion of the results of this study referring to literature that has already been written on work readiness and various specializations.

Starting from the health specialization, this specialization has been previously studied with emphasis placed on the importance of technical and clinical competence as well as social intelligence and personal skills (Walker, Storey, Costa, Leung, 2015). This emphasis is reflected in the results of this study that indicate that graduating students in health perceive to be the most work ready as they perceive that they are not only professionally and clinically knowledgeable but also in possession of the required socially intelligence and personal skills. Although the latter (personal work characteristics) seems to be the least factor receiving positive scores from students in health sciences and all other specializations in this study. Personal work characteristics are important in the holistic development of students. Research results indicate the pressing need to invest more in the personal formation of students.

On the business specialization, Dermott and Ortiz (2017) carried out a research on the work readiness of specifically business graduates. The findings in the current study showing that business specialization students perceive themselves to be not the most work ready in comparison to graduating students from other specializations bring to the forefront the findings by Dermott and Ortiz (2017) that employers are in search for graduates with a mix of social intelligence (communication and soft skills such as attentive listening and awareness of audience), work competence (write persuasively, possess critical thinking and problem-solving skills, and be able to manage time effectively) and organizational acumen (collaboration).

Engineering students in this study are similar to those in the research by Jollands, Jolly and Molyneaux, (2012) as both sets of engineering graduates place emphasis on the work competence elements of work readiness as well as the factors of social intelligence, organizational acumen and personal work characteristics. The engineering graduating students in this study on average scored above 7 on work competence and organizational acumen and below 7 on social intelligence and personal work characteristics.

A recommendation stemming from this study is that students across all specializations attend workshops in personal development and engage in experiential learning aimed at addressing personal skills such as coping with workplace demands, stress management and, self-esteem and self-confidence. This recommendation is based on the research result indicating a low perception of these important personal work characteristics that contribute towards work readiness. Another recommendation may be to evaluate the internship programmes across specializations and the curricula. The aim would be to integrate aspects of all four factors of personal work characteristics, work competence, social intelligence and organizational acumen with special attention to personal work characteristics and social intelligence.

A limitation of this study may be the element of social desirability that may have influenced the responses of students in their graduating years who may want to avoid revealing unpleasant sides of themselves as they approach graduation. Further research may be carried out using longitudinal studies that can track the perception of work preparedness of participants also after they enter the world of work. Comparative studies based on gender or culture may also be a recommendation for future research.

In conclusion, specializations in tertiary education vary not only in terms of curriculum,

technical knowledge, skills and abilities taught, but also in the preparation for employment which influences the perceptions of graduating students of their work readiness. Therefore, with reference to the aim of this research, variations do exist across specializations.

References

Bridgstock, R. (2009). The graduate attributes we've overlooked: enhancing graduate employability through career management skills. *Higher Education Research & Development, 28* (1): 31-44,

Caballero, C., & Walker, A. (2010). Work readiness in graduate recruitment and selection: A review of current assessment methods. *Journal of Teaching and Learning for Graduate Employability, 1*(1), 13 - 25.

Caballero, Catherine Lissette, Walker, Arlene and Fuller-Tyszkiewicz, Matthew (2011). The work readiness scale (WRS): developing a measure to assess work readiness in college graduates, *Journal of teaching and learning for graduate employability, 2* (2): 41-54.

Dermott, K.J. (2007). Enhancing the work readiness of engineering graduates. *World Transactions on Engineering and Technology Education, 6* (1): 113-117.

Dermott, C. and Ortiz, L. (2017). Beyond the Business Communication Course: A Historical Perspective of the Where, Why, and How of Soft Skills Development and Job Readiness for Business Graduates. IUP Journal of Soft Skills, 11 (2): 9 – 24.

Forstenlechner, F., Madi, M.T., Selim, H. and Rutledge, E.J. (2012) Emiratisation: determining the factors that influence the recruitment decisions of employers in the UAE, *The International Journal of Human Resource Management, 23* (2): 406-421.

Haigh, M., Ell, F. and Mackisack, V. (2013). Judging teacher candidates' readiness to teach. *Teaching and Teacher Education 34*: 1-11

Jollands, M., Jolly, L. and Molyneaux, T. (2012). Project-based learning as a contributing factor to Graduates' work readiness. *European Journal of Engineering Education, 37* (2): 143–154.

Modarress, B., Ansari, A. and Lockwood, D. (2013). Emiratisation: From policy to implementation. *International Journal of Human Resources Development and Management. 13:* 188 - 205.

Prikshat, V., Nankervis, A., Priyono, S. and Mohd Salleh, N., Connell, J. and Burgess, J. (2018). Graduate work-readiness challenges in the Asia-Pacific region and the role of HRM. *Equality, Diversity and Inclusion: An International Journal. 37*(4).

Walker, A., Storey, K. M., Costa, B. M., & Leung, R. K. (2015). Refinement and validation of the Work Readiness Scale for graduate nurses. *Nursing outlook, 63*(6): 632-638.

Walker, Yong, Pang, Fullarton, Costa and Dunning, (2012). Work readiness of graduate health professionals. *Nurse education today 33* (2): 116-12

Wheeldon, J. and Ahlberg, M.K. (2012). Mapping mixed-methods research: Theories, models, and measures. *Visualizing Business Research: Maps, Methods, & Meaning*, 113-148.