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Student perceptions of the importance of employability skill provision in business undergraduate programs

Denise Jackson
Edith Cowan University, d.jackson@ecu.edu.au

STUDENT PERCEPTIONS OF THE IMPORTANCE OF EMPLOYABILITY SKILL PROVISION IN BUSINESS UNDERGRADUATE PROGRAMS

ABSTRACT

Studies examining student perceptions of employability skill development in business undergraduate programs are limited. Assurance of student buy-in is important to ensure learners engage with skill provision; to enable them to articulate their capabilities to potential employers and to facilitate the transfer of acquired skills. This study examines 1019 students' perceptions of the importance of employability skill development, the relative importance of skills and the influence of certain demographic/background characteristics. Findings indicate undergraduates value skill development, most particularly communication and team-working, and some significant variations in importance ratings. Alignment with other stakeholder perceptions and the influence of context are discussed.

KEYWORDS

Business, employability, undergraduate, competency, generic skills

There is broad consensus of the value in developing certain skills in business undergraduates as a means of enhancing their employability profile. These employability skills are sometimes referred to as professional, core, generic, key, and non-technical skills and are inherent to enhancing graduate work-readiness (Yorke & Knight, 2004). Employability skills typically considered important in developed economies are team working, communication, self-management, and analysis and critical thinking (Business, Industry and Higher Education Collaboration Council (BIHECC), 2007; Lowden, Hall, Elliot & Lewin, 2011). Governments and employers across developed economies increasingly call for higher education providers to prepare graduates for the workplace (Confederation of British Industry (CBI), 2010; Wilton, 2011). Universities have duly responded with considerable efforts on clarifying which employability skills are most required in undergraduates and, more recently, identifying ways of successfully embedding, developing, and assessing these skills in higher education.

Despite widespread initiatives in employability skill provision in higher education, gaps between graduate workplace performance and employer expectations continue to persist (BIHECC, 2007; Helyer, 2011). Evidence in developed economies suggests employer expectations of business graduates are not being met, particularly in critical thinking, decision making, conflict resolution, leadership, and meta-cognitive skills. There is, however, some evidence of strong performance in working effectively with others, social responsibility, initiative, and confidence (see Jackson & Chapman, 2012).

Importantly, graduate employability is multi-faceted and encompasses academic performance, career management skills, and labour market awareness (Rothwell & Arnold, 2007), in addition to workplace learning (Billet, 2011), and personality theory (Rae, 2007). Skill development in higher education is, however, considered a significant contributor to employability. It features prominently in models attempting to decipher and delineate the precise meaning of graduate employability. Dacre-Pool and Sewell's (2007) model of graduate employability, for example, features employability skills as essential for applying disciplinary knowledge in the workplace environment. Inadequate graduate performance in the workplace is, therefore, often associated with and attributed to poor skill development in higher education.

Employer perception of the importance of employability skill development is well-documented. There is considerably less exploration of other stakeholder perceptions; in particular academics, graduates, students, and their parents. Jackson and Chapman's (2011) recent study of Australian and UK academics from a range of business disciplines found broad consensus on industry-relevant skills for

undergraduates and considerable alignment with employer perspectives. Literature on student perceptions of the importance of employability skill development in undergraduate programs is not only limited (Tymon, 2011) but contradictory. Some (Moreau & Leathwood, 2006; Tomlinson, 2008; Tymon, 2011) suggest students acknowledge the value in developing employability skills in higher education, for short-term economic gain and/or longer term advantages; while others maintain they do not (Rae, 2007).

Understanding student perceptions and achieving student 'buy-in' to employability skill development is important for a number of reasons. First, theory strongly suggests that effective learning requires a clear understanding of the value of presented material and associated activities; enhanced by constructive alignment with explicit learning outcomes (Biggs, 2003). Expanding further, students placing a high value on what they are learning may also impact on their ability to transfer acquired skills across different contexts, such as from the university classroom to the workplace (Bransford & Schwartz, 1999). Further, undergraduate appreciation of the importance of employability skills may prompt better use of portfolios to showcase developed skills in future job applications, thus enhancing their employment prospects. Explicit understanding of the importance of employability skills, and their transparent inclusion in curricula, will enhance student ability to articulate to employers their own capabilities (Heyler, 2011). In light of the GFC and significant economic uncertainty, graduates must acknowledge the increasing need to differentiate themselves from others in a relatively soft labour market.

This study aims to investigate, and compare with other stakeholders, student perceptions of the importance of employability skill provision in degree programs and the relative importance of certain employability skills. The motivation is to consider the potential impact of their perceptions on employability skill outcomes, particularly in light of documented gaps in certain graduate skills. The research objectives for this study are to (i) gauge student perspective on the importance of employability skill development; (ii) determine their perspective on the relative importance of different skills; and (ii) investigate the nature of any influencing demographic/background characteristics on these perspectives.

The underlying premise to this study is that developing employability skills in business undergraduate programs will enhance graduate work readiness. The value of acquiring employability skills is now assumed yet whether these skills should be developed in higher education is still subject to debate. First, some academics believe the skills movement distracts higher education providers from the

traditional value of academic enquiry (Kreber, 2006). Second, Cranmer (2006) argues there is a lack of evidence which confirms skill development in higher education enhances graduate workplace performance. Third, some argue that certain employability skills represent attributes which are fundamental personality characteristics formed at an early age (see Tymon, 2011), although many believe higher education may still add value here (see Villar & Albertin, 2010). Despite these concerns, employability skill provision is broadly considered fundamental in undergraduate programs in developed economies (BIHECC, 2007; McKinnon & McCrae, 2011). Competition for student enrolments, the pursuit of strong graduate employment data, and learning standards and accreditation criteria increasingly focused on employability skills render this situation unlikely to change.

The setting for this study is a learning program dedicated to developing undergraduate employability skills in a business context in a West Australian university. The program comprises four units which are core to the Bachelor of Business. Eighty six percent of participants in the study are completing this degree; the remainder from Law and Justice, Urban and Regional Planning and Sport, Tourism and Hospitality Management programs within the Faculty of Business and Law. Discussion of the research objectives is based on data gathered from 1019 first, second and final year students enrolled in the employability skills program. The paper will first provide an outline of methodology, followed by a presentation of the results. The paper concludes with a discussion of the implications of the findings and their alignment with existing studies on stakeholder perceptions.

METHOD

Participants

Across the 1232 students enrolled in the learning program, 1046 participated in the study. A small number of students did not wish to be included in the analysis, reducing the sample to 1019. Of these, 214 were studying unit one (first year); 338 unit two (first year); 212 in unit three (second year); and 255 in unit four (final year). Table 1 summarises the sample's demographic and background characteristics. (**Insert Table 1**) Given the high response rate and core status of the employability skills program, the sample is considered to broadly represent the student population completing the Bachelor of Business program at the university. The high proportion of Asian international students broadly aligns with undergraduate enrolments in Australia (see Department of Education, Employment and Workplace Relations [DEEWR] 2010).

Procedures

Aligning with Boud and Garrick's (1999) supposition that reflection and self-assessment is vital in cementing and enhancing student learning, a Skills Audit was introduced into the employability skills program. Students are asked to consider the overarching importance of employability skill development in business degree programs and the relative importance of certain skills, in addition to evaluating their own competence in the defined skills. Given the scope and research objectives of the paper, data generated on the latter is not considered here. All students enrolled in the learning program are encouraged to access and complete the Audit electronically each semester. Students from each unit complete the Audit during the latter half of semester and within a two week period of each other to ensure they are at the same stage of skill development as their peers. On-campus students are allocated time during class sessions and the Audit is incorporated into weekly activities for off-campus students.

Instrument

The Audit instrument derives from the program's recently developed Employability Skills Framework (ESF) (see Table 2). (**Insert Table 2**) The ESF was adapted from Jackson and Chapman's (2011) framework of 20 skills, broadly considered to represent typical industry skill requirements of business graduates. Jackson and Chapman's own framework derived from an extensive review of employer-based studies on industry-relevant skill requirements in undergraduates (see Jackson, 2010). The process of adapting their framework to the current ESF is summarised in Jackson, Sibson and Riebe (n.d.). The resulting ESF comprises a set of ten skills and forty constituent behaviours to which each unit's learning outcomes are constructively aligned.

Issues with ambiguity in the precise meaning of certain employability skills (Male & Chapman, 2005) is problematic when defining and operationalising skill frameworks in undergraduate programs. The confusing interchange of terminology for attributes, capabilities, competencies, and abilities (Cornford, 2005) aggravates this further. Homogenous understanding of the defined skills in the program's ESF is addressed through the use of detailed behaviours descriptors; alleviating issues of arbitrariness and misinterpretation among stakeholder groups which are common to studies on employability skills (see Tymon, 2011). The items/measures within the Audit instrument are the skills and behaviours defined in the ESF. As the framework derives from an extensive review of current literature on the meaning and importance of employability skills typically required in graduates, the instrument is considered sufficiently valid to address the research objectives.

Cronbach's alpha was computed for student ratings of their competence in the behaviours comprising each skill set in the framework. Alpha values ranged from .866 to .925, indicating internal consistency among the items. The framework, and therefore the Audit instrument, is deemed to provide a reliable set of measures for each skill. Further, the correlations between individual items (behaviours) and the scale (skill set) ranged from .608 to .818 across the ten skills. This confirms the constituent behaviours within each skill set are measuring the same construct. The online Audit instrument was pretested by eight academics that teach on the learning program and represent a range of business disciplines. A number of minor adjustments to the 'look' of the instrument were made based on their feedback.

To address the research objectives, students self-assessed and reflected on the perceived importance of the skills defined in the ESF in an online survey environment. The first section of the survey instrument captured demographic/background characteristics. Regarding *hours of employment*, students stated the number of hours they currently worked in paid employment each week. Work experience was gauged through three measures: the number of years worked in a trainee position under constant supervision; working independently with no or little supervision; and working in a supervisory or managerial role. Next, students were asked to rate, on a scale of one to seven (one being unimportant and seven being extremely important), the importance of developing the skills defined in the ESF in today's business undergraduate degree programs. Students were then asked to consider the relative importance of the ten skills comprising the ESF using a constant sum allocation. This was achieved by assigning a relative weighting out of 100% to the ten skills, the forecasted average weighting equaling 10% for each. This scale has the advantage of forcing students to prioritise among the different skills, rather than simply stating everything is important (Cohen and SHC & Associates, 2003).

Limitations of the study

The sample included a significant proportion, more specifically 44%, of international students. Of the overall sample, 42% were born in Asia and 40% in Australia. As the paper focuses on skill development in developed economies, this may be problematic. The impact of a significant number of students originating from Asia is difficult to assess as few comparative studies exist on differences in industry-relevant skills between the East and West (Wickramasinghe & Perera, 2010). It is possible international students' own country of origin's culture, economics and societal needs might influence their assigned ratings. Variations by continent of birth and student status are investigated and

reported to isolate any specific influences impacting on the importance of employability skill development and the relative importance of certain skills.

In addition, the extent to which the results on the importance of employability skill development can be generalised beyond the discipline of business is debatable as business undergraduates have more interest and exposure to employability, given the nature of their subject (Parrot, 2010). Further, investigating students currently studying on an employability skills program may bias results as they have been made more explicitly aware of the rationale and benefits of skill development. Finally, combining quantitative methodology with a qualitative exploration of why employability skills are important to students might have enriched the study further.

RESULTS

Importance of employability skill provision

For the 1019 respondents, ratings (on a scale of one to seven) of the importance of employability skill development in business undergraduate programs generated a median of 6.00 and a mean of 5.96 with a standard deviation of 1.03. Measures of kurtosis and skewness were computed for the ratings and were within the normal limits of 10 and 5 respectively (see Curran, West and Finch 1996).

Variations by demographic/background characteristics

A univariate analysis of variance was used to identify any significant variations in importance ratings across the demographic/background characteristics. A liberal significance level of .05 was retained, given the exploratory nature of the study. A significant variation for *unit* was detected; $F(3, 1015)=10.077$, $p=.000$, partial $\eta^2=.030$. Post-hoc results indicated the mean rating of students completing unit two is significantly lower than all the other units ($p=.000$). This unit focuses heavily on developing data analysis skills, due to the removal of a core statistics unit from the Bachelor of Business, and skills in initiative and enterprise. The unit currently has more business disciplinary content than others and learning materials, currently being rewritten, and class activities do not emphasise which employability skills are being explicitly targeted. This may impact on student perception of the importance of employability skill provision although it is important to note the mean rating is still favourable at 5.71.

A significant result was detected for *sex*; $F(1, 1017)=20.791$, $p=.000$, partial $\eta^2=.021$. The 456 males assigned a significantly lower mean score – 5.79 with standard deviation of 1.072 – than the 563 females – mean score of 6.10 and standard deviation of .977 - for the importance of employability

skill development. A significant variation was also detected for *continent of birth*; $F(5, 1013)=2.694$, $p=.020$, partial $\eta^2=.014$. Africa and Europe reported the highest mean ratings at 6.31 and 6.00 respectively. Variations appear to be due to variations in extreme ratings in that African participants assigned a relatively high proportion of ratings of seven and, conversely, Asian and Australian students a relatively high proportion of lower ratings (one to three). A significant result was also detected for *supervisory work experience*; $F(2, 1016)=4.524$, $p=.011$, partial $\eta^2=.009$. Post-hoc tests revealed those with no supervisory experience achieved a lower mean rating than those with one to three years experience ($p=.058$) and four or more years ($p=.004$).

Relative importance of different skills

Of the 1011 students who completed the constant-sum rating exercise, 63 were identified as multivariate outliers through the use of Mahalanobis Distances (MD). MD computes the distance of values from a central measure in the distribution and is considered an effective approach to identifying outliers in multivariate data (Hodge & Austin, 2004). All responses with a chi-square value exceeding the critical value of 27.88 ($p=.001$, $df=9$) were removed, reducing the sample to $n=948$. A conservative level of significance ($\alpha=.05$) was selected given the nature of the test (Hair, Black, Babin & Anderson, 2010). Table 3 summarises the minimum, maximum and mean (*M*) percentage scores assigned to each of the skills by the 948 respondents, in ascending order by mean score. The relatively low associated standard errors (*SE*) suggest a high level of consistency in the ratings of relative importance across the sample. (**Insert Table 3**) Results indicate students assign greatest importance to *working effectively with others* and *communicating effectively* and least importance to *analysing data and using technology* and *developing initiative and enterprise*.

Variations in relative importance by demographic/background characteristics

To address research objective (iii), a series of MANOVAs ($\alpha=.05$) was performed to determine whether the importance of certain skills differed across demographic and background characteristics.

Variations by unit type. A significant interaction was recorded for *unit*; $\lambda=.931$, $F(27, 2734.245)=2.506$, $p=.000$, partial $\eta^2=.024$. Univariate ANOVAs, with a Bonferroni-adjusted significance level of $\alpha=.005$, indicated this effect was due to significant differences across ratings in three different skills. The first was *working effectively with others*; $F(3, 944)=8.063$, $p=.000$, partial $\eta^2=.025$. The second was *analysing data and using technology*; $F(3, 944)=5.201$, $p=.001$, partial $\eta^2=.016$. Finally, there was a significant variation in ratings for *developing professionalism*; $F(3, 944)=5.701$, $p=.001$, partial $\eta^2=.018$.

Post-hoc results indicated that students in unit three (second year) assigned significantly more importance to *working effectively with others* than unit one (p=.002), unit two (p=.000), and unit four (p=.000). In contrast, students in unit three assigned significantly less importance to *analysing data and using technology* than unit one (p=.026), unit two (p=.002), and unit four (p=.004) and also less importance to *developing professionalism* than unit one (p=.005), unit two (p=.001), and unit four (p=.032). The *working effectively with others* skill set is core to unit three and a significant focus in the unit's learning and assessment activities. This may explain why students considered it more important than others yet this trend was not detected for other skills which are predominantly taught in a particular unit.

Variations by demographic characteristics. A significant interaction was recorded for *student status*; λ=.949, F(9, 936)=5.574, p=.000, partial η^2=.051. Significant results for univariate ANOVAs (α=.005) were recorded for *self-awareness*: F(1, 944)=9.294, p=.002, partial η^2=.010; *problem solving*: F(1, 944)=9.085, p=.003, partial η^2=.010; and *developing initiative and enterprise*: F(1, 944)=15.462, p=.000, partial η^2=.016. A significant interaction was recorded for *continent of birth*; λ=.912, F(36, 3453.151)=2.389, p=.000, partial η^2=.023. This effect was due to a number of differences in skill ratings which approached significance (α=.005). Related to this is the significant interaction for English *as the first language*; λ=.950, F(9, 938)=5.496, p=.000, partial η^2=.050. Significant ANOVA results (α=.005) were recorded for *developing initiative and enterprise*: F(1, 946)=13.354, p=.000, partial η^2=.014; and *problem solving*: F(1, 946)=8.453, p=.004, partial η^2=.009.

Further examination of the data indicates that international students, particularly those from Asia, and to a lesser extent Africa, place more value on *self-awareness* than Australian students. Aligned with this, *self-awareness* is more important to those for whom English is not their first language. *Problem solving* is more important to international students, more specifically those born in Asia, and for those whom English is not their first language. Conversely, *developing initiative and enterprise* is less important to international students, most specifically those born in Asia, and those for whom English is not their first language.

Variations by work experience. A significant interaction was recorded for hours of employment; λ=.925, F(45, 4181.112)=1.641, p=.005, partial η^2=.016. This was due to a significant variation (α=.005) for *developing initiative and enterprise*; F(5, 942)=3.306, p=.006, partial η^2=.017. Post-hoc analysis indicates those who work full-time (38+ hours) assign significantly more importance to this skill than

those who do not work at all (p=.026), those who work 1 to 9 hours (p=.033), and 20 to 29 hours (p=.011) respectively. In regard to those who work 10 to 19 hours, the variation between them and full-time worker's perceptions approached significance (p=.064). This implies that full-time workers have a better appreciation of creativity, initiative, and flexibility in achieving career goals. A further significant interaction was detected for *independent work experience*: λ=.969, F(18, 1874)=1.628, p=.046, partial η^2=.015 although no significant univariate ANOVA results were revealed at the more stringent alpha of .005.

DISCUSSION AND IMPLICATIONS

Importance of employability skill provision

Findings indicate that business undergraduates place significant value on employability skill development in degree programs. Although there were minor variations in students' perception of the importance of employability skill development across certain demographic/background characteristics, mean ratings were above average for all groups. The high mean ratings assigned to the importance of employability skill provision are consistent with some studies (Nilsson, 2010; Tymon, 2011) yet contradict others (Rae, 2007). There appears to be little empirical evidence of student perception of skill development in higher education, surprising given its prominence in graduate employability models and the importance of achieving student buy-in to the concept of work-readiness. This study provides clear evidence of students' commitment to the skills agenda in higher education.

Recognition of the importance of employability skill provision among students in this study is reassuring yet raises questions over why graduate skill gaps continue to persist internationally. A prerequisite for meeting employers' expected standards should be learners understanding and engaging with targeted skill outcomes. Results indicate this appears to be the case. One might expect those skills most valued by students – in this case, *working effectively with others* and *communicating effectively* – to be areas in which they perform the best yet there is evidence to suggest otherwise (Tymon, 2011). Does student engagement with the importance of employability skills provision, therefore, necessarily guarantee strong workplace performance?

A further prerequisite is the successful development of required skills in higher education through effective pedagogical practices and assessment activities. Documented inconsistencies in skill provision in higher education, and an associated lack of evaluation of pedagogical approach and

learning outcomes (Lowden et al., 2011), may provide some explanation for persistent graduate skill gaps. The lack of industry input into undergraduate skill development may aggravate this further, despite undergraduate enthusiasm with employability skills provision. It is important to remember that employability is multidimensional and other aspects – such as life spheres and workplace learning – are the shared responsibility of other stakeholders in undergraduate education. Many academics urge increased industry involvement in undergraduate skill development (Ng & Feldman, 2009). In recent years, workplace learning during degree programs – such as the UK sandwich degree, US internships and work integrated learning in Australia – is increasingly acknowledged as an effective tool for skill development and enhancing graduate work-readiness (Billet, 2011; Lowden et al., 2011). Hancock, Howieson, Kavanagh, Kent, Tempone and Segal's (2009) large-scale study of Accounting employers, however, indicated the majority consider skill development the responsibility of higher education providers. Employers should consider ways in which they can contribute to skill development through increased opportunities in workplace learning and professional learning activities (see Lawson, Taylor, Papadopoulos, Fallshaw & Zanko, 2010). In regard to governments, Lowden et al. (2011) argue that increased funding for addressing employability skill provision will facilitate better integration into higher education provider's strategic goals and operational plans.

A further prerequisite for translating employability skill provision to strong workplace performance is the transfer of skills from university to the workplace. The successful transfer of acquired skills will ultimately enable graduates to effectively apply their disciplinary knowledge in the workplace. Graduates may demonstrate considerable enthusiasm for and ability in employability skills yet may lack the tools, influenced by characteristics within their degree program and workplace (see Jackson & Hancock, 2010), to effectively transfer them across these very different contexts.

A further complication which may impact on graduate workplace performance, despite student allegiance with employability skill provision, is inconsistencies in graduate recruitment processes. The plethora of employer statements on what they need in graduates, and to which curricula and pedagogy are being constructively aligned, may not in fact be reflected in their recruitment and selection practices (Tymon, 2011). Essentially, students and higher education may be engaging with industry's skills agenda yet other factors – such as the awarding institution's reputation (Wilton, 2011) – may influence selection more than a candidate's own attention to employability and documented skills repertoire. This study's evidence of a strong desire for employability skill development offers promise to employers that future graduates will engage with the employability agenda yet may not necessarily narrow gaps between industry expectations and graduate outcomes.

Students' strong preference for skill provision also has significant implications for educators. Universities should explicitly address skill development in their programs to compete effectively against other higher education providers for student enrolments. Evidence from Wilton (2011) suggests that although the newer universities emphasise employability skills provision, their graduate's employment prospects are actually worse than traditional universities. The lack of substantive empirical evidence of the benefits of skill development in higher education, in terms of improved graduate employment prospects, is problematic yet often attributed to inappropriate measures. In times of economic uncertainty, a strong domestic currency, tightening immigration laws and falling domestic enrolments; it is recommended that Australian universities should carefully consider how they might attract students on the basis of their employability skill provision.

Variations by demographic/background characteristics

Unit two had a significantly lower mean rating for employability skill provision than the other units. This may be due to the lack of explicit alignment of learning content and activities with the skills framework. Tymon (2011) acknowledges the need to reiterate to students the benefits of employability and adopt overt skill development activities to engage and motivate them in achieving outcomes. Females achieved a significantly higher mean rating than their male counterparts. This aligns with Nabi and Bagley's (1998) study of UK students although more recent findings appear unavailable. African and European students achieved significantly higher mean ratings than Australian students although this may be due to the influence of outliers. In addition, variations in mean ratings by supervisory work experience suggest the more responsibility students gain in the workplace, the more they appear to understand the importance of developing employability skills in higher education. These findings, however, were detected using a relatively lenient alpha value and require further exploration.

Relative importance of skills

The high importance attached to *working effectively with others* and *communicating effectively* aligns with previous studies examining stakeholder perception of the relative importance of industry-relevant employability skills. Team working and communication are consistently identified as among the most highly desired graduate skills by employers in developed economies (Casner-Lotto & Barrington, 2006; Council for Industry and Higher Education (CIHE), 2008; Australian Association of Graduate Employers (AAGE), 2011). Similarly, studies of students indicate they value these skills more than others (Saunders & Zuzel, 2010; Tymon, 2011); as well as studies of academics (Wickramasinghe

& Perera, 2010). As today's workforce comprises an array of cultures, generations and nationalities, the need for employees who can efficiently and sensitively work with others has never been greater. Team-working, along with others, is not a static skill but continuously evolving as changing technological, societal and political environments generate new scenarios in which we must work with others. As outlined in the skills framework, communication spans verbal communication, giving and receiving feedback, effective presentations, and participation in meetings. These combine to form a toolkit essential in work-ready graduates in different work areas and activities. There are, however, other stakeholder studies which suggest different importance rankings. Heterogeneous meanings and different interpretations of skill definitions mean comparisons should be treated with caution.

Variations by demographic/background characteristics

There is varying opinion on whether demand for industry-relevant skills is influenced by contextual factors. Jones (2009) argues context is important while Billings (2003) maintains variations in skill requirements are more likely due to different interpretations in skill meanings. Jackson and Chapman's (2011) study found context made little difference in academic's determination of the relative importance of different employability skills. In this study, there were minor variations in the relative importance of skills by unit type and work experience. The former appear to be sample-specific; the latter indicates that students with full-time positions assign greater importance to *developing initiative and enterprise* than others.

The variations detected for *student status, English as a first language* and *continent of birth* highlight the need to examine differences in industry-relevant skills and the influence of culture across Eastern and Western countries. Given the significant number of Asian students in the sample, it is important to note their preferences for *self-awareness* and *problem solving* may inflate these skills' importance in the study. Literature from the Asia Education Foundation (AEF) (2011) cites self-awareness as critical for living and working in Asia. Conversely, the lack of importance assigned to *initiative and enterprise's* may be distorted by the large number of Asian students. Conventional wisdom would suggest the heavy focus on entrepreneurialism and job mobility in Australia's market economy – as opposed to the 'job for life' mentality in the more restrictive, command economies in certain Asian countries – may explain these variations. These findings prompt further exploration into variations in employability skill provision and importance among countries in the East and West, building on the work of Velde (2009). Interestingly, findings did not support variations in the relative importance of certain skills by sex detected in Wickrasinghe and Perera's (2010) study of Sri Lankan students.

Although Hugh-Jones, Sutherland and Cross (2006) suggest that employability may be viewed from three different perspectives: students, employers and higher education providers; this study's findings show a degree of alignment among the groups. There is strong support for employability skills provision in undergraduate programs and the groups agree on the importance of team working and communication as pivotal components of the graduate toolkit (see Jackson & Chapman, 2011). The role of contextual influences – such as academic discipline, industry sector and country of origin – within and across these groups is more difficult to gauge.

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Table 1 Summary of participant's demographic/background characteristics

Characteristic	Sub-group	Overall	
		n	%
Sex	Male	456	45
	Female	563	55
Age	16-20 years	224	22
	21-25 years	573	56
	26-30 years	132	13
	31-40 years	56	6
	41+ years	34	3
Degree type	Bachelor of Business	875	86
	Other	144	14
Student status	International	448	44
	Domestic	569	56
Continent of birth	Asia	432	42
	Africa	100	10
	Europe	79	8
	North America	5	<1
	South America	1	<1
	Australasia	402	40
First language	English	503	49
	Other	516	51
Hours of employment	0 hours	246	24
	1 to 9 hours	111	11
	10 to 19 hours	318	31
	20 to 29 hours	223	22
	30 to 37 hours	44	4
	38+ hours	77	8
Trainee work experience	0 years	389	38
	1 to 3 years	577	57
	4+	53	5
Independent work experience	0 years	316	31
	1 to 3 years	494	49
	4+	209	21
Supervisory work experience	0 years	661	65
	1 to 3 years	280	27
	4+	78	8

Table 2 Employability Skills Framework (adapted from Jackson, Sibson & Riebe, n.d.)

Employability Skill	Behaviour	Descriptor
Working effectively with others	Task collaboration	Complete group tasks through collaborative communication, problem solving, discussion and planning.
	Team working	Operate within, and contribute to, a respectful, supportive and cooperative group climate.
	Social intelligence	Acknowledge the complex emotions and viewpoints of others and respond sensitively and appropriately.
	Cultural and diversity awareness	Work productively with people from diverse cultures, races, ages, gender, religions and lifestyles.
	Influencing others	Defend and assert their rights, interests and needs and convince others of the validity of one's point of view.
	Conflict resolution	Address and resolve contentious issues with key stakeholders.
Communicating effectively	Verbal communication	Communicate orally in a clear and sensitive manner which is appropriately varied according to different audiences and seniority levels.
	Giving and receiving feedback	Give and receive feedback appropriately and constructively.
	Public speaking	Speak publicly and adjust their style according to the nature of the audience.
	Meeting participation	Participate constructively in meetings.
	Written communication	Present knowledge, in a range of written formats, in a professional, structured and clear manner.
Self-awareness	Meta-cognition	Reflect on and evaluate personal practices, strengths and weaknesses in the workplace.
	Lifelong learning	Actively seek, monitor and manage knowledge and sustainable opportunities for learning in the context of employment and life.
	Career management	Develop meaningful and realistic career goals and pathways for achieving them in light of labour market conditions.
Thinking critically	Conceptualisation	Recognise patterns in detailed documents and scenarios to understand the 'bigger' picture.
	Evaluation	Recognise, evaluate and retain key points in a range of documents and scenarios.
Analysing data and using technology	Numeracy	Analyse and use numbers and data accurately and manipulate into relevant information.
	Technology	Select and use appropriate technology to address diverse tasks and problems.
	Information management	Retrieve, interpret, evaluate and interactively use information in a range of different formats.
Problem Solving	Reasoning	Use rational and logical reasoning to deduce appropriate and well-reasoned conclusions.
	Analysing and diagnosing	Analyse facts and circumstances and ask the right questions to diagnose problems.
	Decision making	Make appropriate and timely decisions, in light of available information, in sensitive and complex situations.

Developing initiative and enterprise	Entrepreneurship/ Intrapreneurship	Initiate change and add value by embracing new ideas and showing ingenuity and creativity in addressing challenges and problems.
	Lateral thinking / creativity	Develop a range of solutions using lateral and creative thinking.
	Initiative	Take action unprompted to achieve agreed goals.
	Change management	Manage change and demonstrate flexibility in their approach to all aspects of work.
Self-management	Self-efficacy	Be self-confident in dealing with the challenges that employment and life present.
	Stress tolerance	Persevere and retain effectiveness under pressure or when things go wrong.
	Work / life balance	Demonstrate the importance of well being and strive to maintain a productive balance of work and life.
	Self-regulation	Reflect on and regulate their emotions and demonstrate self-control.
Social responsibility and accountability	Social responsibility	Behave in a manner which is sustainable and socially responsible (e.g., consistent with company policy and/or broader community values).
	Accountability	Accept responsibility for own decisions, actions and work outcomes.
	Personal ethics	Remain consistently committed to and guided by core values and beliefs such as honesty and integrity.
	Organisational awareness	Recognise organisational structure, operations, culture and systems and adapt their behaviour and attitudes accordingly.
Developing professionalism	Efficiency	Achieve prescribed goals and outcomes in a timely and resourceful manner.
	Multi-tasking	Perform more than one task at the same time.
	Autonomy	Complete tasks in a self-directed manner in the absence of supervision.
	Time management	Manage their time to achieve agreed goals.
	Drive	Go beyond the call of duty by pitching in, including undertaking menial tasks, as required by the business.
	Goal and task management	Set, maintain and consistently act upon achievable goals, prioritised tasks, plans and realistic schedules.

Table 3 Relative importance of employability skill

Skill	Minimum	Maximum	Mean (*M*)	Standard Error (*SE*)
Working effectively with others	5.00	35.00	12.147	.129
Communicating effectively	5.00	30.00	11.615	.113
Problem solving	5.00	23.00	10.144	.073
Self-management	.00	20.00	10.080	.078
Thinking critically	.00	20.00	9.804	.075
Developing professionalism	2.00	23.00	9.405	.079
Social responsibility and accountability	.00	20.00	9.400	.080
Self-awareness	.00	20.00	9.184	.073
Analysing data and using technology	1.00	20.00	9.168	.083
Developing initiative and enterprise	2.00	20.00	9.053	.074