Perception Differential between Employers and Undergraduates on the Importance of Employability Skills

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Abstract
This paper attempts to investigate if the undergraduates’ core competencies are able to meet with the requirements set by the employers and to analyse the effectiveness of personal qualities and employability skills development in private university in Malaysia. Questionnaires survey, mean score comparison, and independent sample t-test are used to capture the perception differential between 30 employers and 600 undergraduates from a local private university on the importance of employability skills. Our results show that the undergraduates are all highly competent in possessing the said personal qualities and skills. However, such skills as critical analysis, planning, problem solving, oral communication, decision making, and negotiating report a slightly higher level of mismatch between employers’ and undergraduates’ perception on their importance and development in the University.

Keywords: Employability skill, Personal quality, Competency, Mismatch, Graduate unemployment

1. Introduction
It has traditionally and shallowly been regarded that a remarkably outstanding cumulative grade point average (CGPA) obtained by graduates through laboriousness in university has been a passport to seeking for a qualification suited, if not highly rewarded employment. It has therefore prompted undergraduates to be devoted to concentrating solely on their studies for academic excellence while compromising co-curricular activity participation, through which employment related soft skills are accumulated. Consequently, hard skills learnt from and emphasised through courses of study in university are virtually not complemented by the possession of personal qualities and soft skills among undergraduates. It has therefore come to our knowledge that a perfect blend of personal qualities, soft skills and hard skills will definitely contribute to enhancing graduate employability, a term where its definition can be connoted from various angles (Harvey, 2001).

Graduate employability is largely referred to as graduates’ possession of certain level of skills and attitudes, as well as their ability to utilise them for job search and retention (Nabi, 2003). The direct beneficiaries of their skills utilisation process are the employers whose job recruitment and candidate selection decision could affect the probability of graduates in securing employment. Graduates whose skills and attitudes are highly valued by employers would definitely succeed in paving their way into the labour market. It is, however, not the case for those whose skills possession is not up to the mark, thus driving up the unemployment rates drastically. With 21,487 new graduate registrants and 33,925 job vacancies recorded through the Electronic Labour Exchange (ELX) system under the Ministry of Human Resource of Malaysia [MOHR] (2008) in the second quarter of year 2008, graduates should not have found it difficult to fit themselves into the labour market. One of the reasons to explain this scenario is their poor command of personal qualities and employability skills which are most sought after by employers nowadays. Employers assume our graduates to have been fully equipped with various skills, and hence, are able to demonstrate them to a higher extent. This assumption may probably be due to the fact that employability skills enhancement has
been viewed as a specific target to be achieved in tertiary education. As suggested by Fallows and Steven (2000), an emphasis on employability skills in the curriculum of every discipline would be able to equip students with critical skills by the time they graduate.

As such, a survey of the importance of employability skills is of utmost importance in generating insights to universities in developing their courses of study. It is always believed that an inclusion of the employers’ dimension into the analysis of the importance of employability skills will produce significant explanation to this issue as they are the closest and most direct evaluators to the graduates’ performance. They are definitely in the right position to comment on the types of skills most needed in different field of employment. This paper, therefore, seeks to expand the dimension of studies previously carried out by the Careers Advisory Board of the University of Western Australia [UWA] (1996) in Australia, and Wye and Liew (2005) in Malaysia on the importance of employability skills. This paper explores that dimension from the perspective of undergraduates as well as the employers. More specifically, this paper attempts to investigate if the undergraduates’ core competencies are able to meet with the requirements set by the employers, besides analysing the development effectiveness of personal qualities and employability skills in private university in Malaysia.

The remaining of the paper is organised as follows: A literature of the works on employability skills done previously is reviewed. Research methodology employed in this paper is explained followed by a research finding in the next section. Policy implication and a conclusion are presented in the last section.

2. Employability skills: conceptual framework and literature review

Change in organisational and employment structure has been widely recognised as the cause of increasing requirement for broader types of skills by employers (Brown, Green, Lauder & Sakamoto, 2001; Kämäräinen, Attwell & Brown, 2002; Kämäräinen & Streumer, 1998). The concept of employability skills can sometimes be referred to as generic skills (UWA, 1996) or the career and employability skills (C&ES), and sometimes be considered as the workplace basics or workplace know-how skills (Hollenbeck, 1994). Despite its diverse definition, employability skills have to be greatly emphasised. In the present paper, employability skills refer to such cognitive abilities as learning to learn, analytic and problem solving, innovative, and communication skill (Bikson, 1994; Bikson & Law, 1995; Stasz, McArthur, Lewis & Ramsey, 1990). These skills make learning new applications possible when these applications are becoming increasingly needed, which validates the fact that ‘graduate attributes’ are more important than the degree subject studied (Harvey, 2000). For some employers, the degree subject studied is not as important as the graduates’ ability to handle complex information and communicate it effectively (Knight & Yorke, 2002). Graduate recruiters want a variety of other skills, personal and intellectual attributes; rather than specialised subject knowledge. Oral communication, teamwork, self-management, problem solving and leadership (Warn & Tranter, 2001) are all important.

In view of the important emphasis placed on the aspect of employability skills in the labour market, measures need to be taken by putting in concerted efforts to equip the employees with as many of the employability skills as possible. Among all types of employability skills that we could ever mention, however, which skills are more highly valued by employers and are most sought after in carrying out daily work tasks?

The Career Advisory Board of the University of Western Australia suggested a survey to be conducted on the development of generic skills among final-year students in the end of 1994 (UWA, 1996). The survey aimed at identifying the generic skills developed through various courses of study offered in UWA, and monitoring students’ general awareness towards these generic skills. Fifteen generic skills were listed in the questionnaires distributed to final-year students of UWA. Based on the framework developed by UWA, Wye and Liew (2005) carried out a similar research within Malaysian context. They concluded that the five skills with the biggest magnitude of differences between Development Index and Importance Index are: 1) to communicate orally in English, 2) to master information, communication and technology and computer skills, 3) to communicate in written English, 4) to release tension and handle risk; and 5) to think creatively and innovatively.

Apart from the soft skills mentioned above, the inclusion of ‘personal qualities’ into the concept of employability is considered to be of great importance to the ‘Skills plus Project’ (Knight & Yorke, 2001, 2002, 2003; Yorke, 2001) as these can have a considerable bearing on students’ success. Drawing upon the work of Dweck (1999) and Bandura (1997), the ‘Skills plus Project’ considers there to be two broad categories of self-belief: (1) an entity/immutable/fixed belief, that one has a set amount of something – intelligence for example, that cannot be changed; and (2) an incremental/mutable/malleable belief that development is possible and even probable.

Students with a fixed belief about their intelligence are likely to be discouraged by failure because failure is construed in terms of inadequate intelligence. These students may avoid more challenging work for fear of failure. Conversely, students with a malleable self-belief are more likely to attribute failure to a lack of effort, and believe that poor performance can lead to further learning. Hence, it is the learning that becomes a source of self-esteem. These students are more likely to learn from mistakes and apply this learning to future tasks. It is therefore this type of self-belief that
should be encouraged and nurtured. In addition to a student’s beliefs about their own fixed or malleable self, students who have a belief in their own ability to produce, organise and undertake tasks (self-efficacy) will have an effect on their performance. Yorke (2001) considered that it is not enough to have a range of cognitive, social, emotional and behavioural sub-skills, but that these have to be integrated into the challenges faced. Therefore, perceived self-efficacy or ability will play an important role in choice of degree programme, career choice and personal development, and is thus significant for an individual’s employability. Personal qualities are also important in the acquisition of subject understanding and the development of skills. A willingness to learn – often from mistakes – implies a preparedness to tolerate a degree of stress in order to achieve success (Knight & Yorke, 2001; Yorke, 2001).

Lees (2002) provided an excellent review on the employability skills literature to look at the employability agenda, curriculum developments and academic perspectives, employability attributes, and Employability Performance Indicators and Employers needs in relation to Higher Education in the United Kingdom. He compiled the following key skills and qualities sought by employers: (1) Personal Qualities. These include malleable self-theory, self-awareness, self-confidence, independence, emotional intelligence, adaptability, stress tolerance, initiative, willingness to learn, and reflectiveness. (2) Core Skills. These include reading effectiveness, numeracy, information retrieval, language skills, self-management, critical analysis, creativity, listening, written communication, oral presentations, explaining, and global awareness. (3) Process Skills. These include computer literacy, commercial awareness, political sensitivity, ability to work cross-culturally, ethical sensitivity, prioritising, planning, applying subject understanding, acting morally, coping with ambiguity and complexity, problem solving, influencing, arguing for and/or justifying a point of view or a course of action, resolving conflict, decision making, negotiating, and team work.

The theoretical framework of the present paper is based on the compilation of skills and qualities done by Lees (2002) and UWA (1996) with a special adaptation made to fit into Malaysian context.

3. Research methodology

A survey has been conducted on two different samples, namely employers and undergraduates. A number of 30 sets of questionnaires have been distributed and mailed to employers or executives who are actively involved in recruitment processes, such as the Human Resource Manager, Personnel Manager, and Human Resource Executive, from large- and medium-size companies in Malaysia. Questionnaires have also been distributed to 600 final-year undergraduates, of which 200 are randomly selected from the Faculty of Accountancy and Management, Faculty of Information, Communication and Technology, and Faculty of Arts and Social Science, respectively, in an anonymous private university in Malaysia (hereafter referred to as “the University”). The undergraduates’ sampling frame used is based on the student’s name list from each faculty (Note 1).

Questionnaire designed for undergraduates comprises of three sections. Section A captures the demographic information of the respondents, and section B requires them to rate their level of competency for each of the personal qualities and skills listed with a five-point Likert Scale measured from 1, being “Very Poor” to 5, “Excellent”. Respondents have then been asked to list and rank the top ten personal qualities and skills that they may think as important to their future employment. Section C elicits information on the development of those personal qualities and skills in the University. The ratings of how well the University is in developing and preparing students with the said qualities and skills are measured from 1, being “Very Poor” to 5, “Excellent”.

Questionnaire designed for employers comprises of two sections. Section A captures the demographic information of the respondents. Section B studies about the employers’ perception on the importance of the personal qualities and skills listed using five-point Likert Scale ranging from 1 being “Not at all Important” to 5, “Very Important”. Respondents have also been asked to list and rank the top ten qualities and skills that they consider as very important to be in the possession of a successful job applicant. Open-ended questions have subsequently been addressed to the respondents requesting them to suggest other qualities and skills not listed in the questionnaire but are deemed as crucial to be possessed by job applicants. Besides that, employers have also been asked to comment on the characteristics of a successful job applicant.

For data analysis, the statistical software, SPSS, has been used to perform Mann-Whitney U test to test the hypothesis of whether there is perception differential between salary offered by employers and expected by undergraduates. Besides that, mean score comparison has subsequently been carried out to compare between perception held by employers on the importance of personal qualities and skills, and perception held by undergraduates in relation to their core competency of such qualities and skills. This analysis reveals the fact of whether students’ possession of qualities and skills is competent in meeting with the expectation and requirement set by employers. Using Independent-Samples T test, the highest mean rating of importance by employers corresponding to the lowest mean rating of competency by undergraduates on the qualities and skills show the highest level of incompetency of the undergraduates in meeting with the expectation of employers. Besides that, mean comparison has also been carried out to identify the mismatch between employers’ requirements and the development of the University on personal qualities and employability skills. Again, the highest mean rating of importance by employers associated with the lowest mean rating of
development by undergraduates on the qualities and skills show the highest level of the mismatch based on an Independent-Samples T test.

4. Research findings

Table 1 displays the Normality Test for the data on the monthly salary offered by employers and expected by undergraduates with a position requiring work experience and not requiring work experience, respectively. The Kolmogorov-Smirnov statistics are statistically significant at 0.01 alpha level, suggesting that the salary data is not normally distributed. As such, nonparametric test has been employed to test the hypothesis of whether there is perception differential between salary offered by employers and expected by undergraduates.

Table 2 shows that the Mann-Whitney U test statistic denotes a sufficient evidence to conclude that there is statistically significant difference between the salary offered by employers and expected by undergraduates with a position requiring work experience and not requiring work experience, respectively (U_w = 4824.0, p-value = 0.000; U_w/o = 6547.5, p-value = 0.011). The RM2 000 monthly median salary with experience expected by undergraduates is RM200 higher than that offered by the employers; while the RM1 600 monthly median salary without experience expected by undergraduates is RM100 higher than that offered by the employers. Although the difference is small, it does, to certain extent, show that undergraduates nowadays over-estimate their ability as fresh graduates in getting higher salary, thus feeling uncomfortable to receive anything lower than their expectation.

Table 3 shows the job areas normally offered by employers and interested by undergraduates. One can notice that Accounting and Finance, Marketing, and Operation/Production are among the job areas mostly offered by employers. Different perception has been found among undergraduates where they are virtually interested in such job areas as Secretarial/Administrative/Human resource/Management, Information technology, and Marketing. The revealed fact can, to certain extent, explain the job market mismatch where undergraduates’ employment expectation is twisted away from that of the employers’. The mismatch, however, is not as serious as one has expected amidst high graduate unemployment rate, since a match of expectation is reported for the job area in Marketing – a well-known and well-rewarded line.

Table 4 displays the mean difference between the levels of importance of personal qualities rated by employers and core competency possessed by undergraduates. Overall, one will notice that the mean ratings of undergraduates in the University for all the personal qualities are between a scale of 3 and 4, denoting that they are confident in viewing their ability of mastering the said qualities as between fair and good. Among all the qualities, they consider themselves as of especial competence in showing their punctuality, willingness to learn, and integrity and honesty. These are the personal qualities rated by employers as between important and very important to be in the undergraduates’ possession (i.e. mean ratings between a scale of 4 and 5). Apart from that, employers even regard graduates’ possession of such qualities as responsible, having positive attitude toward his or her works, and hardworking, as essential in the labour market and would expect graduates to possess them. Using Independent-Samples T test, the results of the level of incompetency lying between 0 and 1 generated from two different perspectives of employers and undergraduates on personal qualities are all statistically significant at 0.05 alpha level, except for such qualities as adaptability and ambitious. This shows that the undergraduates from the University are all highly competent in showing almost all the qualities listed. Such qualities as energetic and enthusiasm denote the highest level of competency among the undergraduates in meeting with employers’ expectation. However, the undergraduates really have to take responsibility seriously when they are at their workplace soon.

Table 5 shows the mean difference between the level of importance of skills rated by employers and core competency possessed by undergraduates. Overall, one will notice that the mean ratings of undergraduates in the University for almost all the skills are between 3 and 4, denoting that they are confident in viewing their ability of mastering the said skills as between fair and good. However, their mean ratings are slightly lower than that of their personal qualities. Among all the skills, they consider themselves as of especial competence in possessing such skills as teamwork, self management, and commercial awareness. These are the skills indicated by employers as between average important and very important to be in the undergraduates’ possession (i.e. mean ratings between a scale of 3 and 5). Apart from that, employers even regard graduates’ possession of such skills as teamwork, problem solving, oral communication, decision making, and critical analysis, as essential in the labour market and would expect graduates to possess them. Using Independent-Samples T test, the results of the level of incompetency between 0 and 2 generated from two different perspectives of employers and undergraduates on skills are all statistically significant at 0.05 alpha level, except for such skills as numeracy and commercial awareness. This shows that the undergraduates from the University are all highly competent in showing almost all the skills listed. Such skills as reading effectiveness and computer literacy denote the highest level of competency of the undergraduates in meeting with employers’ expectation. Interestingly, and perhaps worth-noted that a slightly higher level of incompetency is found in such skills as critical analysis, problem solving, decision making, and oral communication – skills in which employers rated as of especial importance.
When being asked how well the University is in preparing undergraduates for job market, majority of the undergraduates (56.8%) indicated that the University has shown average performance while 18.7 percent of them regarded the performance of the University as good (shown in Table 6). This is indeed an overwhelming majority and thus a credit to the University.

Table 7 shows the mean difference between the level of development of personal qualities in the University perceived by undergraduates and their level of importance as rated by employers. The results postulate a rather good performance of the University in developing and preparing its undergraduates with all the personal qualities listed (i.e. mean ratings between a scale of 3 and 4). Among all, such qualities as respect for authority, hardworking, willingness to learn, and responsibility are most perceived to have been well developed in the University. However, stress tolerance and emotional intelligence are perceived to have been moderately developed. Interestingly, Independent-Samples T tests show that the level of mismatch generated from the mean ratings differential between employers and undergraduates reveals a rather encouraging scenario. A scale between 0 and 1 denotes a rather statistically significant low level of mismatch between the employers’ job market requirements and the development of all the personal qualities in the University. Among all, such qualities as ease fit into culture, respect for authority, adaptability, energetic, ambitious, receptive to training, and independence record the lowest level of mismatch; while integrity and honesty, responsibility, positive attitude toward work, and punctuality report a slightly higher level of mismatch.

Table 8 shows the mean difference between the level of development of skills in the University perceived by undergraduates and their level of importance as rated by employers. The results postulate a rather good performance of the University in developing and preparing its undergraduates with all the skills listed (i.e. mean ratings between a scale of 3 and 4). Among all, such skills as team work, information retrieval, written communication, global awareness, oral communication, computer literacy, and problem solving are most perceived to have been well developed in the University. However, such skills as influencing, critical analysis, and negotiating are perceived to have been moderately developed. Interestingly, Independent-Samples T tests show that the level of mismatch generated from the mean ratings differential between employers and undergraduates reveals a rather encouraging scenario. A scale between 0 and 1 denotes a rather statistically significant low level of mismatch between the employers’ job market requirements and the development of all the skills in the University. Among all, such skills as numeracy, commercial awareness, global awareness, computer literacy, information retrieval, and ability to work cross-culturally record the lowest level of mismatch; while critical analysis, planning, problem solving, oral communication, decision making, and negotiating report a slightly higher level of mismatch.

5. Conclusions and policy implications
An inclusion of the employers’ dimension into the analysis of the importance of employability skills will generate insights to universities in developing their courses of study as they are the closest and most direct evaluators to the graduates’ performance. They are definitely in the right position to comment on the types of skills most needed in different field of employment. This paper, therefore, seeks to expand the dimension of study on the importance of employability skills from the perspective of undergraduates, as well as the employers. Research findings show that undergraduates nowadays over-estimate their ability as fresh graduates in getting higher salary, thus feeling uncomfortable to receive anything lower than their expectation. This attitude is simply intolerable and deserves an effort for change prior to their graduation. Career Advisory Board or even the academics themselves should inculcate in the undergraduates the virtue of being modest as a fresh graduate. They must have the right work values and regard their first job upon graduation as a means of gaining useful experience, which is served as a platform of securing future career. They should not have treated their first job as a way of earning handsome remuneration to reward an effort put and to recoup expenses incurred in schooling investment. Only with this attitude will fresh graduates put aside pecuniary consideration in searching for their first job, thus reducing the graduate unemployment rate while facilitating their efforts in paving their way to a brighter prospect in their career.

Besides that, the undergraduates from the University are all highly competent in showing all the personal qualities listed. Such qualities as adaptability, ambitious, energetic, and enthusiasm denote the highest level of competency of the undergraduates in meeting with employers’ expectation. These personal qualities are of especial importance owing to the fact that it takes a person’s ambitiousness, energy, and enthusiasm to excel in his or her career. Adaptable nature is needed to fit into unforeseeable changes, be it within the job description, or within the organisational structure. As such, Career Advisory Board of a university must make career counselling one of the important agendas as early as in the orientation week of newly recruited undergraduates. Only after the undergraduates are clear of their work values can they choose the right course majoring, thus leading to the right choice of their future career. Apart from that, academics should also expose their undergraduates to different real-life possibilities within the work context. This enables undergraduates to sharpen their adaptability skill in tackling unforeseeable circumstances taking place within their job and company. As such, lectures that are based on case studies of real-life examples related to topics lectured can be conducted.
When asked about how well the University has performed in nurturing and developing the personal qualities among its undergraduates, the result shows that such qualities as stress tolerance and emotional intelligence are perceived to have been moderately developed. Furthermore, such qualities as integrity and honesty, responsibility, positive attitude toward work, and punctuality also report a slightly higher level of mismatch. As such, a course module on stress and emotion management should be made compulsory at higher learning institutions. Different possibilities of stress experienced at workplace of different fields should be exposed to the undergraduates of different disciplines. This is aimed at emotionally preparing them with the kind of stress potentially encountered and measures taken to handle the stress. Besides that, the scope of academic-industry cooperation may also be expanded. Experienced personnel from different industries can be invited to be guest lecturers to share their experience with undergraduates on the type of personal qualities required for different positions.

A slightly higher level of mismatch between the level of importance and development is found in such skills as critical analysis, planning, problem solving, oral communication, decision making, and negotiating. As such, higher learning institutions should design their courses of studies to be more practical. Case studies based on real-life examples should be incorporated in lectures and tutorials by means of classroom simulations and group work assignments. Taking advantage on the academic-industry cooperation practice, real cases at work could also be brought into lectures in order to enable the undergraduates to have a hands-on experience in tackling job task in their areas of studies at the real working world environment. To facilitate this practice, guest lecturers from the corporate sector can play a role in pointing out the mistakes occurred along the learning process. They can subsequently provide constructive feedback to the undergraduates as a means of sharpening their critical analytical skills, problem solving skills, decision making skills, oral communication skills, negotiating skills, and planning skills which are most sought after by employers nowadays.

The importance of having equipped with personal qualities and skills in seeking for an employment is indisputable. It therefore deserves concerted efforts among academics, industries, and students themselves to fully nurture and develop these essentials in an effort to produce competent graduates for the ever-changing labour market.

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**Notes**

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**Table 1. Tests of Normality**

| Variables                      | Group                  | Kolmogorov-Smirnov<sup>a</sup> | Shapiro-Wilk |
|--------------------------------|------------------------|------------------------------|--------------|
|                                |                        | Statistic | df | Sig. | Statistic | df | Sig.   |
| Salary (with working experience)| Undergraduates***     | 0.166     | 600 | 0.000 | 0.709     | 600 | 0.000   |
|                                | Employers              | 0.156     | 30  | 0.059 | 0.940     | 30  | 0.093   |
| Salary (without working experience)| Undergraduates*** | 0.123     | 600 | 0.000 | 0.871     | 600 | 0.000   |
|                                | Employers***           | 0.186     | 30  | 0.009 | 0.888     | 30  | 0.004   |

Notes: <sup>a</sup> Lilliefors Significance Correction *** Statistically significant at 0.01 alpha level

**Table 2. Mann-Whitney U Test**

| Test Statistics | Salary (with working experience) | Salary (without working experience) |
|-----------------|----------------------------------|-------------------------------------|
| Mann-Whitney U  | \( U_w = 4824.000 \)            | \( U_{w/o} = 6547.500 \)           |
| Wilcoxon W      | 5289.000                         | 7012.500                           |
| Z               | -4.331                           | -2.547                             |
| Asymp. Sig. (2-tailed) | 0.000***             | 0.011**                             |
| Monthly Median Salary |                                           |                                    |
| Expected by undergraduates | RM2000                         | RM1600                             |
| Offered by employers       | RM1800                          | RM1500                             |

Notes: *** Statistically significant at 0.01 alpha level ** Statistically significant at 0.05 alpha level

RM refers to Malaysia currency (Ringgit Malaysia)
Table 3. Job area offered by employers and interested by undergraduates

| Area                                                   | Job Offered by Employers | Job Interested by Undergraduates |
|-------------------------------------------------------|--------------------------|----------------------------------|
|                                                       | Percent | Percent |
| Accounting & Finance                                  | 26.7    | 11.8    |
| Marketing                                             | 23.3    | 13.5    |
| Operation/Production                                  | 20.0    | 1.8     |
| Secretarial/Administrative/Human resource/Management  | 16.6    | 29.3    |
| Information technology                                | 3.3     | 25.5    |
| Others\(^b\)                                          | 10.0    | 18.0    |
| **Total\(^c\)**                                       | 100.0 (30) | 100.0 (600) |

Notes: \(^b\) Including research and development and legal related areas. \(^c\) Total number of respondents is shown in parenthesis.

Table 4. Mean difference between the level of importance of personal qualities rated by employers and core competency possessed by undergraduates

| Personal Qualities                  | Undergraduates | Employers | Level of Incompetency\(^d\) |
|-------------------------------------|----------------|-----------|-----------------------------|
|                                     | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. |
| Adaptability                        | 3.64 | 0.81      | 3.83 | 0.70      | 0.19 |
| Ambitious                           | 3.62 | 0.81      | 3.83 | 0.79      | 0.21 |
| Ease fit into culture               | 3.36 | 0.92      | 3.80 | 0.71      | 0.44** |
| Emotional intelligence              | 3.30 | 0.94      | 3.83 | 0.75      | 0.54** |
| Energetic                           | 3.56 | 0.79      | 3.87 | 0.63      | 0.31** |
| Enthusiasm                          | 3.59 | 0.80      | 3.90 | 0.76      | 0.31** |
| Hardworking                         | 3.70 | 0.86      | 4.47 | 0.57      | 0.77** |
| Independence                        | 3.63 | 0.76      | 4.23 | 0.68      | 0.60** |
| Initiative                          | 3.26 | 0.92      | 4.17 | 0.70      | 0.90** |
| Integrity and honesty               | 3.75 | 0.75      | 4.50 | 0.73      | 0.75** |
| Loyalty and commitment              | 3.49 | 0.99      | 4.10 | 0.71      | 0.62** |
| Positive attitude toward work       | 3.62 | 0.80      | 4.50 | 0.63      | 0.88** |
| Punctuality                         | 3.84 | 0.82      | 4.30 | 0.60      | 0.47** |
| Receptiveness to training           | 3.66 | 0.89      | 4.07 | 0.52      | 0.40** |
| Respect for authority               | 3.74 | 0.77      | 4.17 | 0.65      | 0.42** |
| Responsibility                      | 3.69 | 0.84      | 4.73 | 0.45      | 1.04** |
| Self-awareness                      | 3.59 | 0.78      | 4.00 | 0.64      | 0.41** |
| Self-confidence                     | 3.42 | 0.98      | 4.23 | 0.50      | 0.81** |
| Stress tolerance                    | 3.37 | 0.89      | 3.80 | 0.55      | 0.43** |
| Willingness to learn                | 3.76 | 0.84      | 4.50 | 0.51      | 0.74** |

Note: \(^d\) 0 being highly competent; 4 being highly incompetent

** Independent-Samples T test is statistically significant at 0.05 alpha level.
Table 5. Mean difference between the level of importance of skills rated by employers and core competency possessed by undergraduates

| Skills                              | Undergraduates | Employers | Level of Incompetency<sup>c</sup> |
|-------------------------------------|----------------|-----------|-----------------------------------|
|                                     | Mean | Std. Dev. | Mean | Std. Dev. |                  |
| Ability to work cross-culturally    | 3.39 | 0.82      | 3.70 | 0.65      | 0.31**            |
| Commercial awareness                | 3.58 | 0.81      | 3.67 | 0.71      | 0.09              |
| Computer literacy                   | 3.54 | 0.94      | 3.83 | 0.59      | 0.29**            |
| Creativity                          | 3.25 | 0.86      | 3.83 | 0.83      | 0.58**            |
| Critical analysis                   | 2.99 | 0.88      | 4.20 | 0.66      | 1.21**            |
| Decision making                     | 3.27 | 0.88      | 4.27 | 0.78      | 1.00**            |
| Global awareness                    | 3.47 | 0.85      | 3.80 | 0.76      | 0.33**            |
| Influencing                         | 3.12 | 0.87      | 3.53 | 0.90      | 0.41**            |
| Information retrieval               | 3.57 | 0.75      | 3.93 | 0.58      | 0.36**            |
| Negotiating                         | 3.38 | 0.82      | 3.97 | 0.67      | 0.59**            |
| Numeracy                            | 3.33 | 0.83      | 3.57 | 0.63      | 0.24              |
| Oral communication                  | 3.41 | 0.93      | 4.40 | 0.67      | 0.99**            |
| Planning                            | 3.42 | 0.81      | 4.30 | 0.70      | 0.88**            |
| Problem solving                     | 3.39 | 0.84      | 4.40 | 0.62      | 1.01**            |
| Reading effectiveness               | 3.48 | 0.90      | 3.77 | 0.82      | 0.28**            |
| Reasoning/Comprehension             | 3.43 | 0.76      | 3.87 | 0.63      | 0.44**            |
| Resolving conflict                  | 3.53 | 0.78      | 3.97 | 0.85      | 0.44**            |
| Self management                     | 3.65 | 0.78      | 4.23 | 0.57      | 0.58**            |
| Team work                           | 3.93 | 0.76      | 4.60 | 0.56      | 0.67**            |
| Written communication               | 3.34 | 0.84      | 4.13 | 0.73      | 0.79**            |

Notes:  
<sup>c</sup> 0 being highly competent; 4 being highly incompetent  
<sup>**</sup> Independent-Samples T test is statistically significant at 0.05 alpha level.

Table 6. How well the University is in preparing its undergraduates for job market

| Level of Goodness | Percent (%) |
|------------------|-------------|
| Excellent        | 0.8         |
| Good             | 18.7        |
| Average          | 56.8        |
| Fair             | 18.3        |
| Poor             | 5.3         |
| Total<sup>f</sup> | 100 (600)   |

Notes:  
<sup>f</sup> Total number of undergraduates is in parenthesis.
Table 7. Mean difference between the level of development of personal qualities in the University perceived by undergraduates and their level of importance rated by employers

| Personal Qualities          | Undergraduates | Employers | Level of Mismatch\(g\) |
|-----------------------------|----------------|-----------|-------------------------|
|                             | Mean   | Std. Dev. | Mean   | Std. Dev. |                     |
| Adaptability                | 3.22   | 0.80      | 3.83   | 0.70      | 0.62**                |
| Ambitious                   | 3.17   | 0.89      | 3.83   | 0.79      | 0.67**                |
| Ease fit into culture       | 3.41   | 0.90      | 3.80   | 0.71      | 0.39**                |
| Emotional intelligence      | 3.06   | 0.82      | 3.83   | 0.75      | 0.78**                |
| Energetic                   | 3.21   | 0.90      | 3.87   | 0.63      | 0.65**                |
| Enthusiasm                  | 3.10   | 0.85      | 3.90   | 0.76      | 0.80**                |
| Hardworking                 | 3.65   | 0.82      | 4.47   | 0.57      | 0.82**                |
| Independence                | 3.53   | 0.76      | 4.23   | 0.68      | 0.70**                |
| Initiative                  | 3.39   | 0.80      | 4.17   | 0.70      | 0.77**                |
| Integrity and honesty       | 3.22   | 0.79      | 4.50   | 0.73      | 1.28**                |
| Loyalty and commitment      | 3.30   | 0.91      | 4.10   | 0.71      | 0.80**                |
| Positive attitude toward work| 3.43  | 0.84      | 4.50   | 0.63      | 1.07**                |
| Punctuality                 | 3.34   | 0.90      | 4.30   | 0.60      | 0.96**                |
| Receptiveness to training   | 3.37   | 0.95      | 4.07   | 0.52      | 0.70**                |
| Respect for authority       | 3.73   | 0.86      | 4.17   | 0.65      | 0.44**                |
| Responsibility              | 3.61   | 0.84      | 4.73   | 0.45      | 1.13**                |
| Self-awareness              | 3.12   | 0.72      | 4.00   | 0.64      | 0.88**                |
| Self-confidence             | 3.33   | 0.84      | 4.23   | 0.50      | 0.91**                |
| Stress tolerance            | 2.93   | 0.86      | 3.80   | 0.55      | 0.87**                |
| Willingness to learn        | 3.63   | 0.79      | 4.50   | 0.51      | 0.87**                |

Note: \(g\) 0 being No Mismatch; 4 being Highest Level of Mismatch

** Independent-Samples T test is statistically significant at 0.05 alpha level.
Table 8. Mean difference between the level of development of skills in the University perceived by undergraduates and their level of importance rated by employers

| Skills                        | Undergraduates | Employers | Level of Mismatch$^b$ |
|-------------------------------|----------------|-----------|-----------------------|
|                               | Mean | Std. Dev. | Mean | Std. Dev. |                      |
| Ability to work cross-culturally | 3.21 | 0.86      | 3.70 | 0.65      | 0.49**                |
| Commercial awareness          | 3.32 | 0.83      | 3.67 | 0.71      | 0.35**                |
| Computer literacy             | 3.37 | 0.93      | 3.83 | 0.59      | 0.47**                |
| Creativity                    | 3.07 | 0.88      | 3.83 | 0.83      | 0.76**                |
| Critical analysis             | 2.92 | 0.94      | 4.20 | 0.66      | 1.28**                |
| Decision making               | 3.26 | 0.86      | 4.27 | 0.78      | 1.01**                |
| Global awareness              | 3.40 | 0.86      | 3.80 | 0.76      | 0.40**                |
| Influencing                   | 2.87 | 0.89      | 3.53 | 0.90      | 0.67**                |
| Information retrieval         | 3.45 | 0.84      | 3.93 | 0.58      | 0.49**                |
| Negotiating                   | 2.97 | 0.91      | 3.97 | 0.67      | 1.00**                |
| Numeracy                      | 3.27 | 0.89      | 3.57 | 0.63      | 0.30**                |
| Oral communication            | 3.39 | 0.92      | 4.40 | 0.67      | 1.01**                |
| Planning                      | 3.09 | 0.89      | 4.30 | 0.70      | 1.21**                |
| Problem solving               | 3.35 | 0.81      | 4.40 | 0.62      | 1.05**                |
| Reading effectiveness         | 3.23 | 0.87      | 3.77 | 0.82      | 0.54**                |
| Reasoning/Comprehension       | 3.26 | 0.84      | 3.87 | 0.63      | 0.60**                |
| Resolving conflict            | 3.06 | 0.95      | 3.97 | 0.85      | 0.91**                |
| Self management               | 3.31 | 0.89      | 4.23 | 0.57      | 0.93**                |
| Team work                     | 3.94 | 0.81      | 4.60 | 0.56      | 0.66**                |
| Written communication         | 3.42 | 0.88      | 4.13 | 0.73      | 0.71**                |

Note: $^b$ 0 being No Mismatch; 4 being Highest Level of Mismatch

** Independent-Samples T test is statistically significant at 0.05 alpha level.