SOFT SKILLS LEVEL OF MALAYSIAN STUDENTS AT A TERTIARY INSTITUTION: A COMPARATIVE CASE STUDY BASED ON GENDER, AREA OF RESIDENCE AND TYPE OF SCHOOLS

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ABSTRACT
The development of soft skills has been a major concern in the Malaysian higher education scene. In order to identify appropriate strategies in developing these skills among students, it is important for institutions to be aware of soft skill levels of students before they start a degree programme. This paper reports the findings of a study on the soft skill levels of students from the foundation and the diploma programmes of a private institution of higher learning. It includes comparative analyses of the results in terms of gender, area of residence and type of schools.

Keywords: Soft skills, Student development, Comparative study, Gender, Rural-urban, Graduate employability.

1. INTRODUCTION
The issue of soft skills development among Malaysian graduates has been extensively discussed by many of those involved including educationists, policy makers and employers. As graduates produced by the higher learning institutions are ultimately meant to serve as human capital for the nation, feedback from the industry is of vital importance in determining the necessary attributes that they must possess in order to effectively function in a work environment.

One of the main grouses of the industry is the lack of soft skills among the graduates of today, in particular, communication skills, especially in terms of proficiency in the English language, problem-solving skills, interpersonal skills including the ability to lead and work in teams, as well as critical and creative thinking skills (Ministry of Higher Education, Malaysia, 2012).

Many studies have been conducted on soft skills in Malaysian tertiary education. One of the most recent is by Abdul Karim et al. (2012) which is based on the data gathered through the Malaysian Soft Skills Scale (My3S) instrument where students rate their ability in various skills grouped into seven categories. The results show that the mean scores achieved for each of the seven soft skills categories range from 6.3 to 7.8 out of a possible 10. The study finds that students from public institutions rate themselves as more proficient compared to their counterparts from...
private institution with significant differences recorded in all seven soft skills categories. In addition, the study calls for all institutions of higher learning to review their curriculum and recommends that more student-centred and engaging activities such as problem-based learning, presentations and case studies be used in teaching and learning (Abdul Karim et al., 2012).

Shakir (2009) reviewed the implementation methods of soft skills development in Malaysian institutions of higher learning. Her study recommends that institutions embed elements of soft skills in the curriculum itself rather than implementing them as separate units (Shakir, 2009). However, this particular method of soft skills development has its challenges, some of which were identified by Idrus et al. (2009) in a study focusing on lecturers teaching technical courses who have integrated soft skills elements in their classes at a private institution. The results of the study indicate that the negative attitude of students, the limited time to cover the syllabus as well as the large number of students as extremely challenging in implementing this method of soft skills development (Idrus et al. 2009).

In a study targeted at communicative skills, Ngah et al. (2011) focus on the need to design an exit-level English test in order to gather data to be used in reviewing the English curriculum of a public university. As a result of this review, the institution hopes to produce graduates who are communicatively competent in the language and are thus, work ready (Ngah, 2011).

These and other studies focus on the middle and end spectrum of soft skills development in tertiary students. However, not many studies have been done on the initial stage resulting in a ‘one-size-fits-all’ approach to soft skills development. In order to develop suitable soft skills programmes that cater to actual needs, it is important for institutions to be aware of the initial level of proficiency of students before they start their degree programmes.

2. AIMS OF STUDY

This study aims to determine the level of soft skills proficiency of post-secondary school students in the diploma and foundation programmes at a private tertiary institution as perceived by the students themselves. In addition, the study also intends to be comparative in nature where differences in levels between groups divided by gender, type of school and area of residence are explored and analysed. As such, this study is guided by the following research questions:

- What is the self-perceived soft skills proficiency of post-secondary school students in the diploma and foundation programmes of a selected private institution?
- What differences are there in the soft skills level of students in terms of gender, area of residence and type of schools?

3. METHOD

In February 2012, a survey was conducted with questionnaires administered to a total of 363 Malaysian students. The sample size allowed for a +/- 0.05 sampling error with a 95% confidence level.

The sample is based on cluster sampling targeting those attending the ‘Mata PelajaranWajib’ classes, a category of subjects that is only compulsory for Malaysian students enrolled in an
academic programme at a private institution. By targeting this class, the researcher ensures that all fields or majors are represented in the sample. Anonymity and confidentiality are assured as no names or other identification tags are required to be listed on the questionnaire.

The framework is based on the Ministry of Higher Education’s ‘LOKI’ or domains of soft-skills learning outcomes. Specifically they are Communication Skills, Leadership Skills, Teamwork Skills, Entrepreneurial Skills, Values, Ethics & Professionalism, Lifelong Learning & Information Management Skills and Critical Thinking & Problem Solving Skills.

The questionnaire was developed based on an earlier instrument used to study student development in Malaysia and Cambodia. A workshop, attended by several Social Science lecturers, was conducted to modify the instrument to suit the requirements of this study.

The instrument requires respondents to rate their ability to perform tasks placed under the different domains of soft skills based on a 5-point Likert scale (1 – very low, 3 – moderate and 5 – very high). Scores of these abilities are composited into one variable as per the category listed. Descriptive statistics in the form of percentages and means were used in the summary of the results. The normality of the item scores was determined based on skewness and kurtosis values to ensure that parametric statistical test could be used. All are found to be normally distributed. Independent samples t-test was then run to compare soft skills proficiency of students based on gender, area of residence and type of school.

4. RESULTS

A total of 363 questionnaires were distributed and returned. However, 40 were missing vital data on demographic background and thus, a listwise deletion exercise was conducted excluding these from the study, leaving 323 usable sets. Thus, though the response rate is 100%, only 89% are usable for the study. The mean age of respondents is 19.7. The sample is represented by 94 students from the Foundation programmes and 229 students from the various Diploma programmes. The fields of studies represented by these students are Business (23.5%), Engineering (37.8%), Biotechnology (8%), Computing (8%), Allied Health (15.8%) and Hospitality (12.1%). The Cronbach alpha coefficients of all seven categories ranged from 0.806 to 0.865 indicating a satisfactory internal consistency.

4.1. Overall Mean Scores

The mean score and standard deviation for each category are listed in Table 1. The highest score of 3.77 is recorded for the category of Lifelong Learning & Information Management Skills. In addition the categories of Teamwork Skills and Values, Ethics & Professionalism also record a score of more than 3.7. At 3.39, the mean score for Communication Skills is the lowest followed by Entrepreneurial Skills at 3.42.
Table 1. Overall Mean Scores

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Skills</td>
<td>323</td>
<td>1.00</td>
<td>5.00</td>
<td>3.3983</td>
<td>.70361</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>323</td>
<td>1.50</td>
<td>5.00</td>
<td>3.4515</td>
<td>.65588</td>
</tr>
<tr>
<td>Teamwork Skills</td>
<td>323</td>
<td>1.00</td>
<td>5.00</td>
<td>3.7683</td>
<td>.68131</td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>323</td>
<td>1.67</td>
<td>5.00</td>
<td>3.4180</td>
<td>.71877</td>
</tr>
<tr>
<td>Values, Ethics &amp; Professionalism</td>
<td>323</td>
<td>1.00</td>
<td>5.00</td>
<td>3.7216</td>
<td>.63166</td>
</tr>
<tr>
<td>Lifelong Learning &amp; Information</td>
<td>323</td>
<td>1.00</td>
<td>5.00</td>
<td>3.7709</td>
<td>.69614</td>
</tr>
<tr>
<td>Management Skills</td>
<td>323</td>
<td>1.00</td>
<td>5.00</td>
<td>3.6605</td>
<td>.67436</td>
</tr>
</tbody>
</table>

4.2. Differences Based on gender

The results of the t-test analysis are displayed in Table 2. It shows that females have a higher mean score in four out of seven categories. These are Leadership Skills, Teamwork Skills, Entrepreneurial Skills and Values, Ethics & Professionalism while males rate themselves as more proficient in the categories of Communication Skills, Lifelong Learning & Information Management Skills, and Critical Thinking & Problem Solving Skills. However, only one category, Values, Ethics & Professionalism, records a significant difference with a p value of 0.043.

Table 2. Mean Score and Significance Based on Gender

<table>
<thead>
<tr>
<th>Category</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std.</th>
<th>Significance (t-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Skills</td>
<td>Female</td>
<td>134</td>
<td>3.3955</td>
<td>.68174</td>
<td>.05889</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>189</td>
<td>3.4004</td>
<td>.72050</td>
<td>.05241</td>
</tr>
<tr>
<td>Leadership Skills</td>
<td>Female</td>
<td>134</td>
<td>3.4701</td>
<td>.62381</td>
<td>.05389</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>189</td>
<td>3.4383</td>
<td>.67903</td>
<td>.04939</td>
</tr>
<tr>
<td>Teamwork Skills</td>
<td>Female</td>
<td>134</td>
<td>3.8209</td>
<td>.65867</td>
<td>.05690</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>189</td>
<td>3.7310</td>
<td>.69624</td>
<td>.05064</td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>Female</td>
<td>134</td>
<td>3.4478</td>
<td>.71282</td>
<td>.06158</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>189</td>
<td>3.3968</td>
<td>.72410</td>
<td>.05267</td>
</tr>
<tr>
<td>Values, Ethics and Professionalism</td>
<td>Female</td>
<td>134</td>
<td>3.8060</td>
<td>.61440</td>
<td>.05308</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>189</td>
<td>3.6618</td>
<td>.63849</td>
<td>.04644</td>
</tr>
<tr>
<td>Lifelong Learning &amp; Information</td>
<td>Female</td>
<td>134</td>
<td>3.7575</td>
<td>.70374</td>
<td>.06079</td>
</tr>
<tr>
<td>Management Skills</td>
<td>Male</td>
<td>189</td>
<td>3.7804</td>
<td>.69243</td>
<td>.05037</td>
</tr>
<tr>
<td>Critical Thinking &amp; Problem Solving</td>
<td>Female</td>
<td>134</td>
<td>3.6468</td>
<td>.68002</td>
<td>.05874</td>
</tr>
<tr>
<td>Skills</td>
<td>Male</td>
<td>189</td>
<td>3.6702</td>
<td>.67196</td>
<td>.04888</td>
</tr>
</tbody>
</table>

4.3. Differences Based on Area of Residence

Table 3 contains the results of the t-test based on area of residence. Students from urban areas rate themselves to be more proficient in soft skills compared to those from non-urban areas in all categories. With a p value of less than .05, significant difference is recorded for five of the seven
soft skills categories, namely Communication Skills, Leadership Skills, Teamwork Skills, Values, Ethics & Professionalism and Lifelong Learning & Information Management Skills. No significant difference is found for the other two categories of Entrepreneurial Skills and Critical Thinking & Problem Solving Skills.

4.4. Differences based on types of schools

As shown in Table 4, students from national schools rate themselves as more proficient in all seven categories compared to those from private schools. However, significant difference is only recorded for two categories, Leadership Skills and Values, Ethics & Professionalism, with a p value of .045 and .019 respectively. The categories of Communication Skills, Teamwork Skills, Entrepreneurial Skills, Lifelong Learning & Information Management Skills and Critical Thinking & Problem Solving Skills reflect no significant difference in proficiency.
5. DISCUSSION

5.1. Analysis of Overall Mean Scores

The mean score of more than 3.3 for each of the seven skills indicates that the students rate themselves as having higher than moderate proficiency in these skills reflecting a high level of confidence. This leads to a strong sense of self-efficacy which is the ability to make decisions and control actions on matters that are deemed important by them (Bandura, 1997)

This is especially so for Lifelong Learning & Information Management Skills where a mean score of 3.77 was recorded for their ability to learn from a new environment as well as identifying and managing new information. This confidence may have been borne out of the success that students have had in adjusting from a year-long secondary school system to one that practices a semester system and adopts a modular approach.

Another high mean score recorded is for Values, Ethics & Professionalism where they rate their understanding of ethical standards and the concept of social responsibility, their ability to comply and conform to these standards as well as the ability to make ethical decisions based on these standards. This high score is reflective of the Malaysian society in general, where societal moral and religious values are the emphasised cornerstones used in every facet of society.

A particular point of interest is for the category of Entrepreneurship where students assess their ability to identify business opportunities, sell new ideas and overcome challenges. Although the mean score is the second lowest recorded, the idea that students rate their entrepreneurial skills to be between moderate to high raises questions on the validity of their belief. However, the high scores do reflect a high confidence level and this would have a positive impact for any entrepreneurship-related programmes that institutions plan to run for students.

The lowest score among all the seven skills is 3.39 recorded for Communication Skills where students rate their ability in terms of oral communication, written communication and social interaction. It must be highlighted that the language of communication is not identified for this category and is open to interpretation. However, being in the context of a private tertiary institution where the medium of instruction is English, students rate this ability based on their proficiency in that particular language. The lower score in this category is not surprising, as many have found the change of medium from either Malay or Chinese to English to be challenging.
5.2. Comparative Analysis: Gender

Influenced by the various comparative studies on the differences in perceptions based on gender, the researcher strongly felt that this element should be included in this study with initial expectations of finding significant differences in many of the skills. However, the results have proven otherwise where only the category of Values, Ethics & Professionalism shows a significant difference.

This category of soft skills is linked to the sense of commitment and responsibility required in life. Female students across the world have been outperforming their male counterparts in the academic field (Jackson, 2010). The heightened sense of professional ethics has definitely contributed to this development.

In addition to Values, Ethics & Professionalism, females rate themselves higher in Leadership Skills, Teamwork Skills and Entrepreneurial Skills while the males’ scores are higher in the categories of Communication Skills, Lifelong Learning & Information Management Skills and Critical Thinking & Problem Solving Skills. However, in all these six categories, the likelihood of the difference happening by chance is higher than acceptable resulting in the acceptance of the null hypothesis.

5.3. Comparative Analysis: Area of Residence

Generally students from urban areas rate themselves as more proficient in soft skills compared to their peers from non-urban areas. Significant difference is recorded for all categories except for Entrepreneurial Skills. This is not surprising as students living in urban areas have more opportunities to be exposed to various life and school experiences that would improve their soft skills proficiency. However, the ‘modesty’ element must also be factored in as many of those from non-urban areas would consider it taboo to rate themselves highly.

The highest score recorded is for Teamwork Skills, with a mean score of 3.87 for urban and 3.62 for non-urban showing a significant difference of 0.001. In this category, students are asked to rate their abilities in functioning as an individual belonging to a group, in cooperating and collaborating with other team members and adapting to a team culture. Urban students are unsurprisingly more self-assured of their abilities to work in a team compared to their non-urban peers based on the experiences that they have gained in terms of activities and exposure they have received in the fast-paced life of an urbanite.

The category of Lifelong Learning & Information Management Skills also sees a higher score for urban students with a mean of 3.86 compared to the non-urbanites’ score of 3.64 and a p value of 0.004. From their recent experience in a relatively new study environment, students from urban areas are found to be more flexible and able to learn and adapt easily. For students from non-urban areas, opportunities for new experiences are lesser during their secondary school education days leading to a situation of less exposure and opportunities for these skills to develop.

Communication Skills also shows a significant difference and records the lowest mean score for both urban and non-urban students. This indicates that, in general, students realise that this is an area where they are the weakest in. With the lowest mean score recorded of 3.25, students from
non-urban areas have much to gain in the opportunity of studying in an English-medium institution to improve their proficiency in the language.

5.4. Comparative Analysis: Type of Schools

Students from public or national schools rate their abilities higher across all seven categories of soft skills compared to those from private schools. It is important to note that more than 45% of private-schooled students are from schools offering KurikulumBersepaduSekolahMenengah (KBSM), the national Malaysian curriculum for secondary schools, while another 39% are from Chinese Independent High Schools. Only 18% of the students surveyed are from international schools.

Significant difference is recorded in the soft skills categories of Leadership Skills and Values Ethics & Professionalism. In Leadership Skills, student from national schools scored a mean of 3.47 while those from private schools emerged with a mean of 3.23 leading to a p value of 0.045. Private schools offering KBSM usually have a smaller number of students compared to those from national schools. Leadership roles in private schools may not be as numerous as in national schools, especially in co-curricular activities. For the Chinese Independent High Schools, the focus on academic achievement also limits leadership opportunities for its students.

Once again, the lowest score recorded is Communication Skills for students from both national and private schools. Students from private schools have the lowest mean score of 3.17 for this category compared to a mean score of 3.42 of students from government schools. This is again reflective of the realisation that they have much to improve on in terms of their Communication Skills, especially so for students from the Chinese medium schools.

6. CONCLUSION

Based on a large sample of more than 300 students, the findings of this study suggest that students in general are very reasonably self-assured in terms of their soft skills proficiency with the mean score of most hovering between moderate to high. The study also finds that perceptions of soft skills proficiency are also affected to a certain extent by socio-demographic factors of gender, area of residence as well as types of schools. This study reveals the confidence level of students and helps students to self-identify areas where they are weakest in. For the institution concerned, these results can help in curriculum development as well as teaching and learning. As the majority of these students are expected to embark onto a higher level programme upon the completion of their diploma or foundation programme, the results can also help the institution to target the development of skills for which there is a more pressing need.

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