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Marketability and Employability among Institutions of Higher Learning (IPT) Students in Malaysia

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Abstract: Marketability and employability are two important factors driving graduate employment in this knowledge economy (k-economy) that can in turn, drive economic growth. Using both quantitative and qualitative methods with a total of 581 respondents (329 males and 252 females) this study aimed to investigate the level of marketability and employability skills of students in Institutions of Higher Learning (IPTA) in Malaysia and Malaysian students abroad. Quantitative methods used include a questionnaire to determine the level of student's marketability and employability while the method of focus group interviews were used to obtain the factors affecting the marketability and employability of students. Data were further processed and analyzed using descriptive statistics (mean, frequency and percentage) and inferential statistics (t-test and One-Way ANOVA) in Statistical Package for the Social Sciences (SPSS) Version 18.0. A total of 10 demographic factors were reviewed to see whether these factors would potentially affect the marketability and employability of Malaysian university students and Malaysian students abroad. Results showed that the mean level of marketability and employability was at a medium-high level. The findings also revealed that there is a difference in the marketability and employability according toplace of residence, education, parents, university type, education level of parents and the level of study. Multiple regression analysis showed that resilience was the dominant factor in contributing to marketability and that work ethic was dominant factor contributing to employability. The findings are further discussed in the context of their relationship within the education system and economic development in Malaysia.

Key words: Marketability, employibility, students, Malaysia, SSPS, quantitative methods

INTRODUCTION

This study aims to assess the level of marketability and employability of students within the Institutions of Higher Learning (IPTA) in Malaysia and Malaysian students abroad. In addition this study also attempts to determine if there are differences in the level of marketability and employability based on demographic factors including gender, residence, parental education, type of IPTA, family income, parent's occupation, level of education and faculty. Finally, this study attempts to identify factors that affect student marketability and employability skills in additionto the reasons that contribute to the marketability and employability of Malaysian university students and Malaysian students abroad.

Marketability and employability are two distinct concepts. Marketability reflects a person's ability to be employed and therefore, it refers to a set of skills required to be paid by the employer. Employability, on the other hand, reflects the ability of proactive prevention and a holistic approach to working life through better management systems. Proficiency in employability helps in improving the quality of human labor.

In the era of the knowledge economy (k-economy), Malaysia needs workers who have a variety of skills that can meet the diverse demands of most job roles. In addition, to complement the characteristics of k-workers, individuals must possess effective communicationand interpersonal skills, both in reading and writing and abilities inproblem solving and thinking skills to ensure employability. These skill suites will ensure that industry needs are fulfilled to enable the economy to continue to grow and remain competitive. According to the economic report in 2013, training should be planned and managed by offering programs that communicate directly for

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Table 1: List of institutions of higher learning and date of establishment

List of IPTA	Years established
Universiti Malaya (UM)	1962
Universiti Sains Malaysia (USM)	1969
Universiti Kebangsaan Malaysia (UKM)	1970
Universiti Putra Malaysia (UPM)	1971
Universiti Teknologi Malaysia (UTM)	1975
Universiti Islam Antarabangsa Malaysia (UIAM)	1983
Universiti Utara Malaysia (UUM)	1984
Universiti Malaysia Serawak (UNIMAS)	1992
Universiti Sabah Malaysia (UMS)	1994
Universiti Pendidikan Sultan Idris (UPSI)	1997
Universiti Teknolo Mara (UiTM)	1999
Universiti Sultan Zainal Abidin (UniSZA)	2005
Universiti Sains Islam Malaysia (USIM)	2006
Universiti Malaysia Terengganu (UMT)	2006
Universiti Teknologi Tun Hussin Onn Malaysia (UTHM)	2006
Universiti Teknikal Malaysia (UTeM)	2006
Universiti Malaysia Pahang (UMP)	2006
Universiti Malaysia Perlis (UNIMAP)	2006
Universiti Malaysia Kelantan (UMK)	2006
Universiti Pertahanan Malaysia (UPNM)	2006

admission to employment in various productive sectors or to facilitate entrepreneurship. Graduates should also have a positive attitude towards work and be innovative and creative. According to Zainudin *et al*. (2013), the ability to take risks and meet challenges should also be applied to students. Cooperation between colleagues and understanding the goals and demands of employers and being able to work independently in addition to being able to produce quality work are also one of the needs of the industry.

The need of employability among IPTA graduates: Education is a vital instrument for national development. From this perspective, the educational function of the university is to meet human energy demands, especially in the economic and technological sectors. Higher education in Malaysia has seen some changesin recent years. One is in terms of opportunities, reflected in the increase of universities and subsequence rise in the number of students entering higher education (Education Development Plan 2013-2025). Starting with one university in 1957, Table 1 show Malaysia now has 20 public universities (IPTA). For Institutions of Higher Learning (IPTA), almost 90% of the operating costs are incurred by the government.

Dissemination, use and exchange of knowledge are the drivers of economic growth and can lead to the creation of more wealth if national awareness of the importance of the role of knowledge is increased. It is estimated that over 50% of GDP in major economies are based on knowledge or is generated through activities contributed by intensive knowledge-based sectors of education, communication and information. These areas are growing rapidly and can spur economic growth of a country in the face of globalized competition (OECD, 2007).

Research objectives: The objective of this study was to examine the impact of demographic factors, the dimensions of the marketability (basic skills, thinking skills, the affective and value of work) and employability (endurance and time management) among Malaysian university students and Malaysian students abroad. Overall this study has four specific objectives:

- To identify the level of marketability and dimensions of marketability among university students in Malaysia and Malaysian students abroad
- To identify the level of employability and dimensions of employability among university students in Malaysia and Malaysian students abroad
- Review whether there are differences in the level of marketability and employability of university students in Malaysia and Malaysian students abroad
- Identify the factors that contribute to the marketability and employability of university students in Malaysiaand Malaysian students abroad

MATERIALS AND METHODS

In this study the chosen deisgn is use of cross-sectional surveys, also known as a cross-section using a quantitative approach. Selection of the approach is in line with the recommendations by Hair *et al*. (2004), Hair (2005) which states that use of surveys is a effective procedure to collect primary data in the form of beliefs, opinions, attitudes, lifestyle and background information relating to the public such as gender, age, education and individual's income. Surveys are best used when the research project involves gathering information from a large number of samples so that the results can be generalized to the population that is the focus of the study. Therefore, this study aims to collect information on matters related to marketability and employability among university students.

The above statement is also supported by the opinions and statements by Hair *et al*. (2012) and was agreed by Chua (2006). He described surveys as one of the methods used in the positivist understanding of the human activity patterns and to enable predictions to be made through the method of identifying, measuring and expressing the relationship between variables in the phenomenon under a study with accuracy. The survey is a method that is suitable and effective if the study requires measurement or evaluatation of the self, perception and achievement. In this study, we also gather information about the perceptions of a sample of students through the instruments constructed.

The selection of quantitative research design for this study is consistent with the recommendations of Creswell (2009) regarding the criteria to be considered in choosing the approach of the study. Creswell (2009) stated that if the study intends to identify the factors that affect outcomes, understand the strongest predictor of a product orto test a theory or explanation, the quantitative approach is best. In this research, we also examined and took into account three important criteria in determining the selection of the design of this study, namely the problem statement, personal experience of the researcher and the participants who will read this study (Creswell, 2009), so that the selection of the design is appropriate and helpful in dealing with the assessment undertaken.

Sampling: Whilst including the entire population being studied will give a proper inference to a study in matters involving a large population, studying a whole population is impossible to do. The ability of researchers to obtain a representative percentage of students is sufficient and is capable of generating useful and valid results. According to Chua (2006), purposive sampling refers to a sampling procedure in which a group of subjects that have certain characteristics are selected as respondents. In this research, we selected random samples from IPTA and Malaysian overseas students. Random selection is performed to avoid bias and ensure representative samples are obtained.

Majid (2005) in his book titled 'research methods in educatio'n encouraged the use of at least 30 respondents to ensure accuracy in assumptions of the normal distribution and acknowledged that higher numbers of respondents are likely to be more representative of the population. To ensure a sufficient number of samples in accordance with the terms of the sample for analysis using SEM, the recommendations by Hair *et al*. (2012) have been observed in which the minimum number of samples selected is 150-250 people. Therefore, after we considered the recommendations by Krejcie and Morgan (1970), Majid (2005), Gay and Airasian (2000), a sample of 500 undergraduate students from universities in the country and abroad were selected for this study.

Ultimately, we obtained a total of 459 students from the Malaysian public universities and 122 students from foreign universities for use in this study. This number is sufficient for the purpose of multiple regression analysis. In accordance with the ethics of the study, each participant was given a specific identification code. Samples of students were informed about the objectives, procedures and forms for reporting research studies. Sample selection of students according to majors and phase of the study are summarized in Table 2.

Table 2: Table of selected student sample

IPTA	No. of student sample
UKM	168
UNIMAP	90
UPNM	75
UUM	84
UTM	42
IPT Luar Negara	122
Total	581

Instrument: The questionnaire was developed based on traits identified on marketability skills indicators which were described by Little (2003) whilst the questionnaire based on traits identified on employability indicators were developed in this study. Marketability traits were as:

- The ability to learn
- The ability to work alone
- Communication skills through writing
- The ability to work in teams
- The ability to work under pressure
- Accuracy and attention to detail
- The ability of high concentration
- Oral communication skills
- The ability to solve problems
- Initiative and tolerance

From these traits, we classified the items into three parts (Part A-C) in order of importance as suggested by Little (2003). Items of working abilities are classified into three parts (Parts D and E). These priorities are as:

- Part A: Contains items demographic size
- Part B: Contains 33 items measuring current experience according to studies in institutions
- Part C: Contains 22 items measuring the effectiveness of the education systemand self preparedness
- Part D: Consists of 11 items in measuring basic marketability skills traits
- Contains 12 items measuring high thinking skill trait in marketability
- Contains 12 items measuring affective skill trait in marketability
- Consists of 60 items measuring work value skills trait in marketability
- Part E: Consists of 20 items measuring work management skills trait in employability
- Consists of 40 items measuring endurance in employability

RESULTS

Mean value of marketability and employability of students on different higher learning institutions: All the higher

Table 3: Mean value of marketability students in institutions of higher learning (IPTA) and Malaysian students abroad

Students	Mean	N	SP
IPTA	3.77	459	0.433
Overseas	3.88	95	0.384
Overall	3.79	554	0.427

Table 4: Mean values employability in institutions of higher learning (IPTA) and Malaysian students abroad

Students	Mean	N	SP
IPTA	3.86	456	0.442
Overseas	4.03	89	0.355
Overall	3.89	537	0.434

Table 5: Mean value of dimensions in the measurement of the level of marketability and employability

Trait	Mean	N	SP
Marketability	3.79	537	0.427
Basic skills	3.80	537	0.410
Thinking skills	3.82	537	0.474
Affective trait	3.90	537	0.515
Work ethics	3.75	537	0.456
Employability	3.89	537	0.434
Time management	3.95	537	0.374
Student's resilience	3.85	537	0.443

institutions in Malaysia produced a significant mean scorein marketability with 3.88 and 3.77 for students in Institutions of Higher Learning (IPTA) and Malaysian students abroad, respectively (Table 3). This shows overseas students have a higher mean in marketability compared with local university students. In general, Malaysian students were found to have a moderately high marketability meanat 3.79. On the employability, students abroad showed a higher mean score (mean 4.04) than the IPTA university students (mean 3.86). Overall, the mean value of Malaysian students was at a moderate level (mean 3.89) (Table 4). Overall dimensions of the marketability and employability among students in Malaysia is medium-high (Table 5).

Differences in marketability and employability according to demographic factor: A significant difference in marketability was identified according to student's residence, father's education level and the location of the IPTA ($p<0.05$). Table 6 shows the differential scoring in marketability and employability according to gender, demographic, parent's educational background and institution (IPTA or abroad). Students living in the citydemonstrated higher meanthan students living intown. Meanwhile, students with fathers that have tertiary education exhibited higher minimum scores of marketability. The study also demonstrated significant higher marketability in students that study abroad. The observation of factors influencing employability was similar to those affecting marketability.

Multiple regression analysis of marketability and employability

Marketability model: Hair *et al*. (2012) emphasized that multiple regression analysis is subject to several assumptions. These assumptions are crucial in order to ensure the analysis can be generalized to the population of the study. The assumptions include that sample size is adequate, data are not isolated, multi-colinearity is not present and the data are normally distributed. SPSS made simpleis the procedure used for analyzing multiple regression requiring step-wise inputfor variables data in order to determine the influences and contributions of the variables on student leadership quality. In this study, stepwise multiple regression analysis was used to determine the relationship and contribution of the variables that were stated in the following hypothesis.

Hypothesis: The determination of co-curriculum activities, experiences in institution, research experiences durability, time management, parent's education level and institution in influencing marketability of students.

Multiple regression analysis was started with the variable of co-curriculum activities and followed by experiences in institution, research experiences, durability, time management, education level of father and institution. Since, the demographic factor data are discrete (nominal and ordinal) these data were converted into dummy data. Table 4 showed the results of stepwise multiple regression analysis from the input data of independent variables against dependent variables of marketability. Table 7 showed the overall adjusted R^2 that significantly contributed 75.6% to marketability that the durability variable was the main contributing factor (68.7%) followed by time management (6.3%) research experiences (0.7%) and the institution reputation (0.2%).

The highest main predictors for marketability is the durability ($\beta = 0.488$, $t = 13.862$ and $p<0.01$) followed by time management ($\beta = 0.392$, $t = 11.106$ and $p<0.01$). Research experiencescontributes as the third variable to the marketability (($\beta = 0.085$, $t = 3.335$ and $p<0.01$) while institute reputation contributes the least to marketability ($\beta = 0.047$, $t = 2.080$ and $p<0.05$). Analysis of variance $F = 401.673$ is statistically significant at $p<0.01$. The sum of R^2 ($R^2 = 0.756$) shows the contribution of the four variables to the marketability.

Employability model: Analysis was conducted to investigate co-curriculum activities, experiences in institution, research experiences, basic skills, thinking skill, effective trait, value of task, father education level and the institution reputation to contribute to the

Table 6: Statistically significant demographic factors in marketability and employability

Traits/Factors	N	Mean	SD	t-values	df	Sig.
Marketability						
Male	311	3.7680	0.46808	-1.288	552	0.198
Female	243	3.8150	0.36585			
City	293	3.8509	0.38125	3.622	540	0.000
Town	249	3.7190	0.46654			
Secondary	394	3.7782	0.39573	-1.161	540	0.246
Tertiary (mother)	148	3.8259	0.49816			
Secondary	310	3.7466	0.39345	-2.560	540	0.011
tertiary (father)	232	3.8406	0.45928			
IPTA	459	3.7691	0.43270	-2.379	552	0.018
Abroad	95	3.8830	0.38352			
Employability						
Male	307	3.8594	0.46519	-1.862	543	0.063
Female	238	3.9290	0.38631			
City	289	3.9663	0.38848	4.697	531	0.000
Town	244	3.7937	0.46033			
Secondary	389	3.8725	0.39965	-1.707	531	0.088
Tertiary (mother)	144	3.9443	0.50737			
Secondary	310	3.8317	0.41771	-3.607	531	0.000
Tertiary (father)	223	3.9673	0.44240			
IPTA	456	3.8626	0.44243	-3.343	543	0.001
Abroad	89	4.0290	0.35533			

Table 7: Regression analysis of marketability

Variables	B	SD	B	t-values	Sig.	R^2	Percentage
Durability	0.465	0.034	0.488	13.862	0.000	0.686	0.687
Time management	0.335	0.030	0.392	11.106	0.000	0.749	0.063
Research experiences	0.053	0.016	0.085	3.335	0.001	0.755	0.007
Institute reputation	0.052	0.025	0.047	2.080	0.036	0.756	0.002

Predictors: Constant, durability; Predictors: (Constant), durability, time management Predictors: Constant, durability, time management, research experiences; Predictors: Constant, durability, time management, research experiences, institute reputation

Table 8: Regression analysis of the employability students in Malaysia

Variables	B	SD	B	t-values	Sig.	R^2	Percentage
Value of task	0.489	0.031	0.508	15.710	0.000	0.677	0.677
Effective trait	0.124	0.033	0.144	3.792	0.000	0.731	0.055
Basic skills	0.104	0.033	0.120	3.165	0.002	0.744	0.013
Experiences in Ins	0.119	0.022	0.142	5.458	0.000	0.752	0.008
Institution	0.130	0.026	0.112	5.006	0.000	0.764	0.012
Thinking skill	0.094	0.034	0.103	2.765	0.006	0.767	0.003

Predictors: Constant, value of task; Predictors: Constant, value of task, effective trait; Predictors: Constant, value of task, effective trait, basic skills Predictors: Constant, value of task, effective trait, basic skills, experiences in Inst, institution; Predictors: Constant, value of task, effective trait, basic skills, experiences in Inst, institution, thinking skill

employability. In this study, stepwise multiple regression analysis was used to determine the relationship and the contribution of independent variables that were stated in the following hypothesis.

Hypothesis: Determination of co-curriculum activities, experiences in institution, research experiences, basic skills, thinking skills, effective trait, value of task, father education level and the institution reputation in influencing the employability of students

Multiple regression analysis was started with the variable of co-curriculum activities and followed by experiences in institution, research experiences, basic skills, thinking skill, effective trait, value of task, father education level and the institution reputation. Since, the demographic factor data are discrete (nominal and ordinal) these data were converted into dummy data. Table 8 showed the results of stepwise multiple regression analysis from the input data of independent variables against dependent variables of employability. Table 8 showed the overall Adjusted R^2 that significantly contributed 76.7% to employability that the value of task was the main contributing factor (68.7%) followed by effective trait (5.5%), basic skills (1.3%), institute reputation (0.8%), institution (1.2%) and thinking skill (0.3%).

The major contributing variable of employability is the value of task ($\beta = 0.508$, $t = 115.710$ and $p<0.01$), followed by effective trait ($\beta = 0.39144$, $t = 3.792$ and $p<0.01$). Basic skills appeared to be the third contributing variable ($\beta = 0.120$, $t = 3.165$ and $p<0.01$), meanwhile, thinking skill contributed the least ($\beta = 0.103$, $t = 2.765$

and $p<0.01$). Analysis of variance in Table 8 obtained F = value equals to 283.587 that is significant at $p<0.01$. Sum of R^2 ($R^2 = 0.757$) demonstrated the six independent variables contribute to employability.

DISCUSSION

The objective of the study was to investigate the level of marketability and employability of IPTA students and the abroad Malaysian student. Table 9 shows the summary of the findings.

The findings of the study demonstrate that the IPTA students and the abroad students both possess high level of marketability and employability. This indicates that the IPTA and abroad institution of choice are at satisfactory quality. Institutions of education are responsible for production of talented scholars that are fundamental to the development of Malaysia. Becker (1993) was among the economists thathave proven the importance of two crucial components in human resource development, education and practice that exhibit positive corelations with economic growth.

This current study shows significant difference in student residence (city and town), father education level and parent's occupation in resulting marketability and emplyability. The findings were parallel to previously reported demographic factors influencing marketability and employability (McLaughlin 1992; ACCI, 2002; Hair *et al*., 2004; Salleh, 2010).

Analysis of regression showed the significant contribution of variable durability factor as the main prediction for marketability, followed by time management, research experiences and institute reputation. On the other hand, employability was influenced by the main contributing factor of value of task that was followed by effective trait, basic skills and thinking skill. Research emphasized the importance of durability in determining the employment outcome.

Findings of Soo and Juma'ayah (2001) research that involved 152 industrial employers and 130 manufacturing engineering technical trainers reported that the trainers have integrated part of the 'employability' skill aspect in the training course. Durability and value of task were among the aspects that were integrated in the training course. However, the current study identified that there was a different between the skills that were delivered by the trainers and the skills required by employers. Employers required skills in personality aspects such as the ability to work in groups, the ability to be decisive, being able to resolve problems, participate in projects, critical thinking, positivity and responsibility. These were among the crucial skills that were required for most professions.

Table 9: Summary of the findings in this study

Objectives	Findings	Descriptions
Marketability level	Min. 3.79	High mean value
Employability level	Min. 3.89	High mean value
Differences in marketability and employability level		
According to Gender		
Marketability	$p = 0.198$	Not different
Employability	$p = 0.063$	Not different
Residence		
Marketability	$p<0.05$	Different
Employability	$p<0.05$	Different
Mother education level		
Marketability	$p = 0.246$	Not different
Employability	$p = 0.088$	Not different
Father education level		
Marketability	$p<0.05$	Different
Employability	$p<0.05$	Different
Institution		
Marketability	$p<0.05$	Different
Employability	$p<0.05$	Different
Family income		
Marketability	$p = 0.508$	Not different
Employability	$p = 0.093$	Not different
Mother occupation		
Marketability	$p<0.05$	Different
Employability	$p<0.05$	Different
Father occupation		
Marketability	$p<0.05$	Different
Employability	$p<0.05$	Different
Faculty of institution		
Marketability	$p = 0.648$	Not different
Employability	$p = 0.649$	Not different
Contributions of co-curriculum activities, institute reputation, education experience, durability, time management, father education level and institution to		
Marketability	Significant $p<0.05$	Overall 75.6%
Employability	Significant $p<0.05$	Overall 76.7%

A study conducted by Yahya (2002) reported that the marketability skills from the employers and trainers perspective for graduates of vocational training institutes of agriculturewere similar to those reported by Soo and Juma'ayah (2001). According to Yahya (2002), marketability skills is an aspect of "employability" skill that is important and should be known by everyone as it can improve the efficiency and quality of the individual to be more competent in the world of work. These skills are complementary to the preferred technical skills.

CONCLUSION

In this study, the level of marketability and employability skills of students in the Institutions of Higher Learning (IPTA) and Malaysian students abroad were studied. The study found that in general the marketability and employibility depends on several factors. Among these factors are the personality characteristics such as durability and value of work

experience in addition to their studies at the university, demographics and the effectiveness of the education system. However there are some disadvantages that need to be improved to enhance the marketability and quality of student's employibility with the industry. Hence, this study is expected to be beneficial to the National University of Malaysia in particular and to all educational institutions in order to produce students who marketability and employibility to enable future employment success.

REFERENCES

ACCI., 2002. Employability skills: An employer perspective; getting what employers want out of the hard basket. ACCI, Brisbane, Queensland, Australia.

Becker, G.S., 1993. Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education. 3rd Edn., University of Chicago Press, Chicago, Illinois, ISBN:9780226041209, Pages: 390.

Chua, Y.P., 2006. Kaedah dan Statistik Penyelidikan Asas Statistik Penyelidikan: Buku 2. McGraw-Hill, Malaysia.

Creswell, J.W., 2009. Research Design: Qualitative, Quantitative and Mixed Methods Approaches. 3rd Edn., Sage Publications, Los Angeles, California, ISBN:9781412965576, Pages: 260.

Gay, L.R. and P. Airasian, 2000. Educational Research: Competencies and Application. Merrill Publication, Indianapolis, Indiana, ISBN:9780130961037, Pages: 661.

Hair, A., 2005. [Information and communication technology: Employer claims, mastery and impact on marketability]. Proceedings of the National Conference on E-Community, December 6-7, 2005, Universiti Kebangsaan Malaysia, Bangi, Malaysia, pp: 178-187.

Hair, A., H. Azizi, I. Rahmah and U. Jegak, 2004. [Employee skills: Balance between claims of employers and mastery]. Proceedings of the National Conference on Graduate Research in Educational Studies, September 11, 2004, Universiti Putra Malaysia, Seri Kembangan, Malaysia, pp: 1-19 (In Malay).

Hair, A., Y. Ishak, A. Arawati and M.M. Zafir, 2012. [Reliability of local IPM graduates: Employer perspective (In Malay)]. Malaysian J. Youth Stud., 7: 77-92.

Krejcie, R.V. and D.W. Morgan, 1970. Determining sample size for research activities. Educ. Psychol. Meas., 30: 607-610.

Little, B., 2003. The international perspective on employability. Master Thesis, Aston University, Birmingham, England.

Majid, K.M., 2005. [Educational Research Methods]. Dewan Bahasa dan Pustaka, Kuala Lumpur, Malaysia, (In Malay).

McLaughlin, M., 1992. Employability skills profile: What are employers looking for?. Conference Board of Canada, Ottawa, Canada.

OECD., 2007. Education at a glance: OCED indicators 2007. OECD HQ Paris, Paris, France.

Salleh, A.M., 2010. [Career Education and Human Capital Development]. Penerbit Universiti Kebangsaan Malaysia, Bangi, Malaysia, ISBN:9789679429275, Pages: 83 (In Malay).

Soo, W.L. and S. Juma'ayah, 2001. [Industrial relations and vocational education: Issues and strategies]. Proceedings of the National Seminar on Technical and Vocational Education, November 7-10, 2001, Universiti Putra Malaysia, Serdang, Selangor, pp: 163-170.

Yahya, B., 2002. [Employability skills integration in the vocational education and industrial education program in Malaysia]. Master Thesis, Universiti Tekologi Malaysia, Johor Bahru, Malaysia. (In Malay)

Zainudin, H., N.A.G. Mohd and M. Mahani, 2013. [Human resource development: Case studies state University in Malaysia (In Malay)]. Charact. Educ. J., 1: 28-37.