

Self Employability of Malaysian Public Higher Education Institution Graduates Nationwide

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Abstract

This study was mainly to investigate the level or readiness which consisted variable like personal attributes and personal quality of PHEI graduates' perception on their employability. In order to justify the objectives in elaborating this dimension in the overall Graduates Employability Questionnaire (GEQ, 2010) was adopted and the result showed every dimension of the GEQ with a) level of employment circumstances/learning was with mean score of 3.35; b) level of self-attitude towards responsibility which statement of self willingness to take up responsibility without interference of third part as well as other characteristic showed mean score of 3.89; and c) level of soft skills in work life showed significant mean score of 3.99. As far as determination of relationship or between selected factors and the employability of these graduate were concerned, statistically graduates' personal readiness factor was positive, moderate correlation with the employability of graduates ($r = .500$, $N = 184$, $p < .05$); Guilford's rule of Thumb was applied indicating supportive that personal readiness of graduates could influence the employability of one; the correlation between personal attributes and personal qualities also showed contributive results ($r = .608$, $N = 184$, $p < .05$ and $r = .428$, $N = 184$, $p < .05$) respectively. This concluded that personal readiness of PHEI graduates should highly emphasize on constructional proficiency programme in the university delivery system especially for undergraduate programme concerned.

Keywords: *Graduates Employability Questionnaire (GEQ, 2010); Readiness (personal attribute and personal quality); Public Higher Education Institutions (PHEI)*

Introduction and Problem Statement

Generally, the graduates of one Public Higher Education Institutions (PHEI) would still momentum establish their delivery of knowledge and skills to their clients but it is investigate further research in social psychological perspective as far as scientific and systematic research study is concerned.

As far as extension as a process, it links subjects on a continuous basis with evolving research-based and tested knowledge, technologies, procedures and perspective that may be in own purposes (Boone, 1989; Rahim Md Sail, 1995).

The extension mission eventually is to help people to develop their capacity and potential to manage and to cope with changes in their environment especially universities' graduates in this study and their contribution to their clients after graduated. On top of that this study would even venture into factors that influence employability level with social psychology perspective.

Products of public higher education institutions are treated as human resource that the outcomes of planned programmes. In the planned programme, a point to bear in mind would have been the avoidance of human resource wastage and this is a very critical issue and is fundamental matter in extension education which it was focus on Human Resource Development (HRD). This study focuses particularly on human resource that been produced by PHEI would reacted as human resource as far as graduates concerned.

In reality, the conceived programme may not achieved their planned objectives and this could be due to many factors such as the without exclusive of extension in practice especially when doubtful of graduates capabilities in the work place and they were indirectly became an unemployable human resource or the low employability among PHEI end product to practice in actual work place as human resource because as present, there are many jobless of diploma holders and degree graduates of public higher education institutions. For instance, in 2012 there were approximately comments about local graduates not up to mark, who were out in the work place with their respective documents but, because of their own lacking of readiness or low in the employability were unable them to obtain a job (Graduates of IPT Jobless. 2006. April, 4 & Star, March 5, 2012). Why is this happening constitutes as a major problem that is the main concern of this study?

Problems arise especially regarding the level of employability of the graduates that significantly contribute to the fundamental human resource problem that have been major concern for a long time. More to the point is the question about important indicators that could address shortcomings in the present system of education. How successful are "tailored" programmes of particular public higher education institution and/or what are the other factors such as the graduates' self-readiness that could influence the employability of one's graduates?

However, from the human resource view of point, this self-equipped (graduates of PHEI) disposition should develop in the university setting. In the context of a wider range of global experience, in terms of people and future economies, it would be necessary for an employee to be sensitive to cultural sensibilities and local politics. This social science perspective is strictly becoming important reference points and a source of human resource concepts especially in the areas of training subjects or the human resource development implemented. On top of that, it is philosophically HRD had been defined as helping individuals to develop their full potential and readiness, although the question remains as for what ends (Hargreaves & Jarvis, 1998).

Factors Influencing the Graduates' Employability

A survey of the related literature from the 1950s until the present has identified macro and micro factors that influence graduates' employability. The macro factors would be liked: changes in science and technology, the globalization process, structural changes, geographical changes, economic changes, wars, riot and others which could give rise to changes in the social economy or changes in the social culture (Hills, Robertson, Walker, Adey & Nixon, 2003). As far as this study is concerned, these macro factors are not able to be controlled and are part of its delimitations.

However, in the related literature review, what come firmly across are the micro aspect factors that had significantly attracted many researchers from the 1950s until 2012 to venture into the exploration of attributes that influence graduates employability. These factors covered personal readiness as main factor and also the perception graduates toward their programme attended. The interpretation of their relationships with graduates' employability would enhance the total growth of a nation. Thus, there is a significant need to further investigate these micro aspects especially independent factors which would give impact of added value to graduates.

Methodology and Design

This study was a descriptive and correlation research design which was undertaken by means of a mail survey method (Baumgartner & Hensley, 2006; Best & Kahn, 2003; Kerlinger, 1973).

A correlation design study determines and describes the relationship between independent and dependent variable that happened as the way things are (Baumgartner et al. 2006). In terms of scientific research, this study has two research objectives to be examined the differences, and relationships between the selected independent factors and the employability of graduates.

Non-experimental in nature, correlation design research utilizes a wide variety of methodologies to collect data such as survey, interview, direct measurement and observation being prevalent techniques (Baumgartner & Hensley, 2006). This study used the mail survey method to collect data from graduates in the workplace. They had graduated from their respective public higher education institutions and had been working between six months to a year. They were in the age group of 19 to 28 years old.

Population and Sampling

The term population referred to an entire group or aggregate of people or elements having one or more common characteristics. In this study, the population was graduates who had the experience of six months to one year time involvement in the workplace and aged between 19 and 28 years old.

The population of graduates who been selected according to the criteria listed above, a total sample size of 300 graduates was calculated proportionate according to the subtotal population produced by selected respective PHEI and it came to appropriately around 27 percent to the whole population in limitation concerned period of time in this study to generate of the results of overall, and it was considered the appropriate sample size that genuine accepted from the help of application from statistical package G–Power (Faul & Erdfelder, 1992).

Based on the principle of mathematical measured with proportionate sample method which obtained the subtotal of each PHEI were drawn liked. As a result, after the application of the procedures in calculating with electronic measuring tool and the following samples size with a total of 300 respondents selected. The samples of 300 appropriately proportion from population and they were selected among samples randomly from a name list that was obtained from the respective alumni unit, student welfare departments or faculty and single sample was chosen according to the table of random numbers (R.A. Fisher & F. T. Yates, 1995) in order to be well and equal chances given for every potential graduates throughout the nation and this protocol would represented appropriateness for this study especially the results of this study would be valid and reliable to generate the overall cohort on the investigation regarding the employability of graduates among PHEI.

The samples of 300 to whom the adopted questionnaire (GEQ) was distributed according to the number of graduates produced in each selected PHEI. This resulted was protocol appropriate in measure the cohort employability which was regarding the selected sample size in percentage of the subtotal as: UTM with total 50 respondents (27.2 percent), UM, 38 respondents (20.6 percent), UiTM, 60 respondents (32.6 percent), UKM, 18 respondents (9.8 percent) out of the population and UPSI with 18 respondents (9.8 percent). As the result of the process of collecting data with mail survey method, a overall total of 61.33 percent or 184 of the selected samples responded to the final GEQ (Table 1, p.29).

Table 1: Proportionate Stratified Random Samples from the Population of Malaysian Graduates Who Graduated from the Selected PHEI.

University Responses	Populations	No. of GEQ Distributed to Samples	No. of Responses From Samples	Percent of samples from population
UTM	350	96	50	7.2
UM	277	72	38	20.6
UiTM	218	60	60	32.6
UKM	150	41	18	9.8
UPSI	113	31	18	9.8
Total	1108	300	184	61.33%

In this study, the samples were formulated to generate representation of the population of this group of graduates with a significant alpha level of .05, in three factors of independent and one entity of dependent variable as the graduates' employability. As far as the G-power statistical tool concerned, the statistical power was .95. This was considered with the F-test on means in the ANOVA test because of comprises of nine demographical profiles in measure a graduate's employability, a priori analysis as varies demographical profiles such as monthly income, length of time to obtain first job and age of respondents on employability as far as an accuracy mode and scientific to appropriately sample size concerned to generate the result of this study.

Demographic profiles were collected as part of this study and the items included: age, gender, ethnic, status of employment, sector of employment, university attended, monthly income, job searching mechanism and length of time obtain first job.

Readiness - Personal attributes and Personal qualities

In this dimension, it consisted of 27 factors and which were divided into 15 statements or factors of personal attributes and 12 statements or factors on personal qualities respectively and they were highly reliable of Cronbach's alpha .882 and .831 which compiled in Part B of the adopted questionnaire. Moreover, the overall personal readiness was with the Cronbach alpha of .856 and this means that this factor was highly reliable and valid to consider as the independent factor in this study.

Reliability of the Instrument Used

In terms of the reliability of the constructed variable’s questionnaire after the EDA process, Cronbach’s Alpha was .882 and .831 respectively as showed in Table 2

Table2. The Cronbach’s Alpha Values of the Personal Readiness

Factors	Cronbach’s Alpha	Items
<i>Readiness</i>	<i>.856</i>	<i>B1 – B27</i>
Personal attributes	.882	B1 – B15
Personal qualities	.831	B16 – B27

Demographic Findings

A total of 184 respondents from five public higher education institutions graduates responded to the formulated questionnaire in this mailed survey. The demographic profiles consisted of nine factors which were included in the final questionnaire in order to gather demographic data as stated in the research questions formed. The demographic data were summarized in Table 3 on page 31.

Table 3: Demographic Profiles of Respondents (n= 184)

Variables	Frequencies	Percent
University		
UiTM	60	32.6
UTM	50	27.2
UM	38	20.6
UKM	18	9.8
UPSI	18	9.8
Gender		
Males	113	61.4
Females	71	38.6
Ethnicity		
Malay	142	77.2
Chinese	17	9.2
Indian	14	7.6
Others (Bumiputera)	11	6.0
Status of Employment		
Employed	174	94.6
Unemployed	10	5.4
Sector of Employment		
Government	117	63.6
Private Company	57	31.0
Freelance	10	5.4
Lifelong Learning		
Master Degree	83	45.1
Others	1	0.5
None	100	54.4
Job Search Mechanism		
Advertisement	44	23.9
Internet	31	16.8
Friends/Family	25	13.6
Offered during internship	22	12.0
HR Department	13	7.1
Univ.Career Unit	8	4.3
Career Agency	5	2.7
Others	36	19.6

Graduates of UiTM were represented by about one third (32.6 %) of the respondents, followed by 27.1 percent of UTM graduates, 20.6 percent of UM graduates and 9.8 percent each for UKM and UPSI.

Males and Malay graduates formed the highest percentage of the respondents with 61.4 percent and 77.2 percent respectively. The majority of respondents (94.6%) were employed with government sector and private companies. 45.2 percent had pursued and acquired master degree. In terms of job search mechanism used by graduates, advertisement was the most popular way to enhance job (23.9%), followed by internet (16%) and friends/family (13.6%). This means that the newspaper advertisement or other word was the written information would be preference for this group of respondents

Employability among Graduates of PHEI

The first objective of this study was to determine the employability among graduates and this descriptive results were presented.

Measuring the employability of among the public higher education institutions graduate was a useful and meaningful study. It had been widely researched especially from different perspectives within different time frames and by different countries since the 1950’s until 2012. However, this study was considered as the most recent research with initiative afford in determining the employability of graduates among PHEI.

Table 4: Overall the Employability of Sports Science Graduate (n = 184)

Level	Freq	Percent	Mean	S.D
Graduates Employability			3.84	.33
Low (1- 2.33)	-	-		
Moderate (2.34 – 3.66)	55	29.9		
High (3.67 – 5.00)	129	70.1		
Employment Circumstance/Learning			3.53	.37
Low (1- 2.33)	-	-		
Moderate (2.34 – 3.66)	132	71.7		
High (3.67- 5.00)	52	28.3		
Self attitude towards Responsibility			3.89	.37
Low (1- 2.33)	-	-		
Moderate (2.34 – 3.66)	49	26.6		
High (3.67 -5.00)	135	73.4		
Soft skills in Work life			3.99	.36
Low (1 - 2.33)	-	-		
Moderate (2.34 – 3.66)	32	17.4		
High (3.67- 5.00)	152	82.6		

Table 4 p. 32 was summarized the data on the employability of graduates. Overall, the respondents indicated the choice of very strongly agreed on each statement or element for the item D1 to D45 with the characteristic concerned. The overall mean score was 3.84 with a .33 standard deviation and this indicated that overall graduates were at a high level of employability with 70.1 percent respondents showing a high level above 3.67, and only 29.9 percent of the respondents showing a moderate level of employability.

In conclusion, these graduates showed highly employability in the workplace and they were able to obtain employment in whatsoever environment and they were definitely not the group that contributed to unemployment or unemployable youth as extension human resource nationwide. In other word, the self assessment of these graduates were giving result of positively as well as capable to self-sufficiently into and within the workplace, managed to fulfill self potential through sustainable and accessible employment who had been employed depends on the soft skills they possessed and their self-attitude. The way self- equipped to present in the employers and this showed the human resources were highly value added and could performed their employability wherever there went at in whichever the involved this would consider an added value extension human resource.

Level of Soft Skills in Work Life

Graduates' soft skills in work life were a serious consideration with statements about abilities that these respondents present such as: they could focus on the problem, never give up and be innovative and creative, identify problem and evaluate them on one's own, create vision, mission and accomplishment of work, be a good listener, uphold work ethic, sustain own career after attending a course, establish networking easily, be a very particular and practical person if needed, utilize resources for organizational improvement, manage global advantages to improve own organization, use communication skills well with all parties and fully used evaluation results to improve further for the organization.

The mean score for this factor was 3.99 and with a standard deviation of .36 and there was total of 82.6 percent respondents who strongly agreed that they were at a high level of soft skills in work life and only 17.4 percent of the respondents were at the moderate level (Table 4, p.32).

Graduates' soft skills equipped them to be employed as well as to be employable into the workplace and this means soft skills played a major role in development of employability. This variable as shown in the National Training and Education Target (United Kingdom) and defined as soft skills for achieving and was equivalent of National Vocational Skills Quadrant 3 (NVQ3) factors of self-reliance, adaptability and a broad range of skills, as well as knowledge and experience.

These non-technical or tactical skills were the capabilities that highly perceived and wanted by employers in terms of consideration especially under training and development of an organization or work place and these were very critical issues. These phenomena persist and remain as critical issues until today.

As the conclusion, the statistically described that the employability of PHEI graduates in term of soft skill in work life presented well and high level of soft skills especially facing their

actual work life or workplace. They could easily solve their own problems as well as the organization problem with their equipped soft skills without any critical problem and this factor would contributed in the Sports Science graduates as an entity of extension as well .

Relationship between selected factors and the employability of graduate is to determine the relationship between selected factors: Personal Readiness and the employability among graduates.

Table 5 (p.34) showed that the results of this study statistically on personal readiness factor was positive, moderate correlation with the employability graduates ($r = .500$, $N = 184$, $p < .01$) and according to Guilford’s rule of thumb, this indicated that this result supported personal readiness could influence the employability of graduate among PHEI. Therefore, the better the personal readiness level of those graduates, the higher would be the tendency of the level of graduate employability to face the workplace requirement or employment.

Regarding to the findings of Louise Grogan and Gerald J Van den Berg (1999) that the result was with $R = .45$ in the 230 respondents supported the present study that the personal readiness characteristics were influence the employability of PHEI graduates as far as employment was concerned.

The correlation between factors of personal attributes and personal qualities showed a contributive statistic: ($r = .608$, $N = 184$, $p < .01$; and $r = .428$, $N = 184$, $p < .01$) respectively that this result indicated they had a moderate correlation or influence on a graduate employability at the .05 level of significance.

Table 5: Correlation Coefficients between Selected Variable and the Employability of Graduates (n = 184)

Variables	<i>r</i>	<i>p</i>
Readiness	.500	.000
<i>personal attributes</i>	.608	.000
<i>personal qualities</i>	.428	.000

In conclusion, this independent variable was moderately correlated with the dependent variable. They had substantial relationship and positive direction leading to the conclusion that the better level of personal readiness of a graduate, and the higher level and would significantly correlated to the employability level of them in the workplace. These findings were in line with past research. Therefore, this finding was considered significantly contributed to the body of knowledge, especially HRD in Sports.

Conclusion

The adopted GEQ could identify the employability of PHEI graduates holistically through self assessment questionnaire in within 38 minutes. It was relevant for graduates of public higher education institutions and this was the early initially empirically constructed questionnaire. It was adaptable and adoptable for the use of the whole nation public higher education institution graduates were concerned. It was contributing to the body of knowledge especially to the human resource in general.

At the same time, this study measured that the different levels of the employability of graduates with personal readiness as well as determining the relationship factors between them in order to profile of the employability level of graduates among PHEI as far as an added value extension in contributing to the nation's Gross Domestic Product.

As the conclusion of this study, findings of this study found that PHEI graduates were fully equipped with personal readiness to react as an added values human resource to present themselves to employers as well as to obtain employment in the workplace within shorter duration so that they would not be categorized as a contributor to unemployable and this would not increase the unemployment rate throughout the nationwide or even global the recommended there is a need to highly emphasize on constructional proficiency programme in the university delivery system especially for undergraduate programme concerned.

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