“Postgraduates’ perception about the causes of brain drain among Malaysian professionals”

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ARTICLE INFO	Harish Chandar, Junaimah Jauhar and Ahmad Bashawir Abdul Ghani (2015). Postgraduates’ perception about the causes of brain drain among Malaysian professionals. *Problems and Perspectives in Management*, *13*(2-si), 365-370
RELEASED ON	Tuesday, 28 July 2015
JOURNAL	"Problems and Perspectives in Management"
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES **0**

NUMBER OF FIGURES **0**

NUMBER OF TABLES **0**

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Postgraduates' perception about the causes of brain drain among Malaysian professionals

Abstract

The focus of this quantitative study is to uncover the causes of brain drain among Malaysian professionals by examining the relationship between four independent variables (unattractive remuneration packages, poor opportunities for career growth, poor job satisfaction and poor quality of life) and the dependent variable (brain drain) by obtaining perceptions of Malaysian postgraduates studying in higher institutions in Malaysia. This is because postgraduates from the cluster of the highest education level in Malaysia could offer highly valued views. Brain drain is classified as the emigration of individuals with technical skills or expertise from developing countries to developed countries offering better job opportunities. Malaysia's development has been plagued as this phenomenon has continuously robbed Malaysia's professionals' contribution, with 308,834 high skilled Malaysians migrated from Malaysia in year 2013.

A total of 170 questionnaires were distributed through snowball sampling and convenience sampling to respondents; postgraduates studying in universities located in Penang and Kuala Lumpur. Several statistical techniques were applied in SPSS such as descriptive statistics, factor analysis, reliability analysis, correlation analysis and multiple regression analysis. Through multiple regression analysis, it was found that unattractive remuneration packages, poor opportunities for career growth and poor quality of life have positive relationships.

Keywords: brain drain, postgraduates, perception, Malaysia, professionals.
JEL Classification: M12.

Introduction

The effects of globalization and industrialization have made the world population witness a dramatic economic growth in the recent years. For each country, economic growth is important since it indicates not only its employment rate, but also its wealth and standards of living (Yellow, 2010). However, globalization has also forced many developed countries to increase their mammoth search for skilled intellectuals from developing countries that are of a cheaper option. Unavoidably, with the increased mobility, this has resulted in the shortage of human talent in the developing countries as many of them prefer to seek opportunities abroad.

This phenomenon is called brain drain and it was defined by Baruch et al (2007) as emigration of intellectuals with high level of skills, competence and qualifications from their country of origin. It has been a worry to many policymakers in the developing countries as they face constant poaching of talents from developed countries (Gibson & McKenzie, 2011). In Asia, the brain drain phenomenon is highly noticeable, especially in Southeast Asia, in which Malaysia is one of the countries possessing one of the highest emigration rates (World Bank, 2011).

Table 1. The size of Malaysian brain drain by country of destination (World Bank, 2011)

Country of destination	Brain drain (year)	
	2000	2010
Balanced sample total	184.014	276.558
Singapore (residents only)	66.452	121.662
Australia	38.620	51.556
United States	24.085	34.045
United Kingdom	12.898	16.609
Canada	12.170	12.807
Brunei	6.438	10.208
New Zealand	4.221	6.708
Other countries	19.130	22.962

From Table 1, it is clear that 276.588 Malaysian professionals left the country in 2010 and migrated to other developed countries compared to 184.014 in 2000. That is, a staggering rise of 50% in ten years. It has been evident that Malaysia is currently facing an increasing exodus of talent throughout this period as they are struggling in retaining their local talent. The findings presented by Penang Institute's chief executive officer, Dr Lim Kim Hwa, at the forum of brain drain titled "Who Gains? Who Sacrifices?" revealed figures of 308,834 high-skilled Malaysians migrated from Malaysia in the year 2013 (Mok, 2014, Jun 22).

According to Deputy Human Resources Minister, Datuk Ismail Abdul Mutallib, brain drain is occurring in almost all key industries in the country, especially the high-end businesses, such as finance, property, manufacturing and hospitality sectors (The Star, 2013, Sept 12). With lack of talent, these industries will not be able to innovate and move up the value

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chain as they have to rely on low skilled immigrant labours as their talent pool (Lim et al., 2014, July 2).

In short, brain drain is a painful truth of international trade of human resources and will continue as far as it benefits the developed and powerful nations (Shah, 2010). By losing such qualified and skilled workforce, Malaysia's economic development will be undermined as they suffer from loss of productivity due to inadequate human capital and loss of fiscal revenues from taxation of human capital (Daugeliene & Marcinkeviciene, 2009).

Malaysian Government has realized that brain drain has the potential to derail the country's productivity, as well as economic and human capital development in future. However, the debate among policymakers has often focused on the emigration numbers and its impact on the Malaysian economy without articulating clearly the causes of this emigration (Foo, 2011).

1. Objective of the study

The focus of this study is on identifying the causes of brain drain among Malaysian professionals by obtaining postgraduates' perception. In this study, brain drain has been defined as the movement of skilled professionals from their native country to another country in order to seek more attractive opportunities (Kwok & Leland, 2001). Four predictors were identified which could force these professionals to migrate. They were unattractive remuneration packages, poor opportunities for career growth, poor job satisfaction and poor quality of life. Theory of Reasoned Action and Maslow's Hierarchy of Needs were used as theories underpinning brain drain in this study. It was also done with the intention of expanding the existing literature database on brain drain in terms of Malaysian context, as most of the research regarding brain drain has been conducted in Europe, with little research being carried out in Asia.

2. Gaps in previous studies

Lately, there has been a growing interest from local researchers to study the brain drain phenomenon in Malaysia (Jauhar et al., 2009; Jauhar & Yusoff, 2011; Foo, 2011; Jian et al., 2013; Yuen et al., 2013), the literature available on this topic is still lacking and requires more attention, especially in uncovering the causes of migration (Fatimah et al., 2013). Therefore, it is hoped that the findings of this study would contribute to national policy debates and help Malaysia to chart its path towards its Vision 2020 goals (Foo, 2011). However, none of these studies have explored or gauged the views of postgraduates with regards to the brain drain phenomenon. Thus, this study is significant as it aims to establish the causes of brain drain in Malaysia by gathering postgraduates' perception.

Postgraduates can be made up of both Generation X and Y. They can be made up of either full-time students pursuing their research interest or working professionals who are undertaking further studies to obtain better opportunities for career advancement or remuneration. With higher qualification, these postgraduates become accessible to migration (Beine et al., 2008). Postgraduates are also expected to be more matured in understanding of brain drain as they form the highest cluster of education level and their perceptions might be based on prior experience. Therefore, this research aims to plug the gap by gathering postgraduates' perception on the causes of brain drain among Malaysian professionals.

3. Research objectives

Quantitatively, this study attempts to accomplish the following objectives:

- To identify whether unattractive remuneration packages contribute to brain drain in Malaysia.
- To uncover whether poor opportunities for career growth contribute to brain drain in Malaysia.
- To determine whether poor job satisfaction contributes to brain drain in Malaysia.
- To analyze whether poor quality of life contributes to brain drain in Malaysia.

4. Hypotheses development

4.1. Unattractive remuneration packages. Table 2 displays annual net wages in Malaysia compared to the other countries, 2013. In fact, Malaysia is still very much a country with low labour costs as its wages have been lagging far behind the developed countries, such as Singapore, the United Kingdom and Australia.

Table 2. Annual net wages in Malaysia compared to other countries, 2013 (Penang Monthly)

2013 annual net wages	Singapore (US$)	Malaysia (US$)	United Kingdom (US$)	Australia (US$)
Legislators, senior officials, managers	78,049.19	25,555.92	47,321.36	43,695.49
Professionals	54,359.04	22,231.94	43,732.30	37,065.60

Source: Ministry of Manpower, Singapore; Department of Statistics, Malaysia; Office for National Statistics, UK; Australian Bureau of Statistics, Malaysia.

Jauhar et al (2011) conducted a study and employed Maslow's hierarchy of needs in understanding the reasons that is driving the brain drain of accountants in Malaysia. High salary and benefits were found to be the components which would satisfy the need of security as it makes a person financially secure. Gaiduk et al (2009) claimed that employees are motivated to search for better options if they feel that their organization underestimates their contribution by offering them below par remuneration.

Consistent with these findings, the following hypothesis on the relationship between poor remuneration packages and brain drain is articulated:

H1: There is a significant positive relationship between unattractive remuneration packages and brain drain.

4.2. Poor opportunities for career growth. In today's world, career growth matters a lot to professionals. Most companies are going through a "crew shift" as older generation employees retire and young graduates enter the workforce. These youngsters, known as Generation Y, are motivated by growth, career opportunity, and meaning. Some of them may choose to leave as they are frustrated with their career growth as most companies in Malaysia still prefer to reward loyalty over productivity.

The research done by Yuen et al (2013) on the propensity to work abroad among Generation Y working adults in Malaysia indicated that career prospect is the major factor since majority of the respondents claimed there were insufficient opportunities for promotion and self-improvement in Malaysia. A study done by Kurka et al. (2008) on the brain drain of young Austrian researchers found that these researchers were enticed to migrate if they would have the opportunity to work with world renowned scientists at prestigious research institutions offering top research infrastructure in the chosen area of specialization.

Consistent with these findings, the following hypothesis on the relationship between poor opportunities for career growth and brain drain is articulated:

H2: There is a significant positive relationship between poor opportunities for career growth and brain drain.

4.3. Poor job satisfaction. A survey conducted in Malaysia by JobStreet.com in September 2012 titled Employee Job Satisfaction in Malaysia indicated 78% of the respondents were not happy with their current job. The top reason most employees felt unhappy at work was because of poor job satisfaction (JobStreet, 2014, Aug 2).

From a study done by Oberoi and Lin (2006) on the migration of South African doctors to Australia, it was found that job satisfaction was a major push factor as many of them were not happy with poor management and lack of work procedures. Shah (2010) also pointed out lack of respect for the professionals as a contributing factor in accelerating Pakistan's brain drain.

Consistent with these findings, the following hypothesis on the relationship between poor job satisfaction and brain drain is articulated:

H3: There is a significant positive relationship between poor job satisfaction and brain drain.

4.4. Poor quality of life. For young professionals, the start-up costs of acquiring a property and transport have escalated rapidly in Malaysia. In the 2013 Quality of Life Index (QLI) for Country which measures how satisfied the citizens are with life in the country, Malaysia was rated lower than most developed countries, such as Singapore, Australia and Great Britain, ranking 40th from 67 participating countries (Numbeo, 2014, Sept 10).

A study done by Foo (2011) highlighted a one point increase in this QLI for a destination country associated with a 0.3 per cent point increase in the rate of high-skilled migration from Malaysia. With a base of 11 million high-skilled Malaysian-born workers aged above 25 years old in 2011, 0.3 percentage points corresponded to 33,000 more high-skilled workers drawn away from Malaysia.

In Malaysia, Yuen et al. (2013) and Jauhar et al. (2011) have done studies on quality of life but the former incorporated more of the safety, security and social issues, while the latter explored more of the work-life balance and working hours.

Consistent with these findings, the following hypothesis on the relationship between poor quality of life and brain drain is articulated:

H4: There is a significant positive relationship between poor quality of life and brain drain.

5. Research framework

From the above discussion, a research framework was developed and proposed to examine the postgraduates' perception on the causes of brain drain among Malaysian professionals.

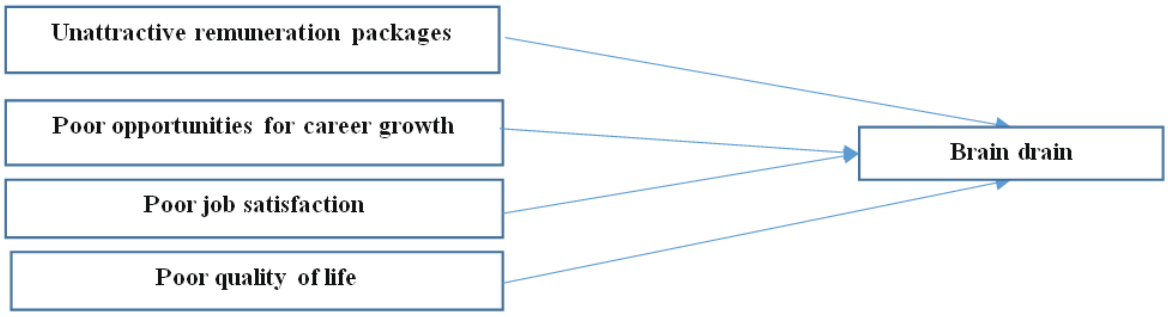

Fig. 1. Proposed conceptual framework for the study

6. Methodology

For this study, 170 postgraduates from Penang and Kuala Lumpur were selected as the samples for this research. Snowball sampling and convenience sampling were selected since the samples are easily available by accessibility and contact. A survey-questionnaire approach was used to gather data in the form of responses from respondents via personal touch and email.

The questionnaire consisted of a total of 39 items, including six items for demographic information. There were seven items each for the four predictors and five items for the criterion. These items were rated on a 5-point Likert scale ranging from 1: Strongly Disagree to 5: Strongly Agree.

Once the questionnaire was completed, a pilot test was carried out by distributing the questionnaire to ten respondents to gauge their understanding on the terms used in the questionnaire and to gather valuable feedback. One useful suggestion taken into account was to remove the headings of the variables in the questionnaire. This was done to prevent respondents from being biased to a particular variable. Testing and analyzing of the data was done using SPSS (Statistical Package for Social Sciences) software Version 21.

7. Findings

7.1. Profile of the respondents. Among the respondents, 69 (40.6%) of them were male while 101 (59.4%) respondents were female. In terms of ethnicity, 50 (29.4%) were Malay, 67 (39.4%) were Chinese, 47 (27.6%) were Indian and 6 (3.5%) belonged to other ethnicities. Most of the respondents in this study were from the Generation Y as 116 (68.2%) of them were between 21-30 years old, 42 (24.7%) were between 31-40 years old, 10 (5.9%) were between 41-50 years old and only 2 (1.2%) were above 50 years old. Besides, 108 (63.5%) of these respondents were studying in universities located in Penang while 62 (36.5%) were studying in universities located in Kuala Lumpur.

7.2. Findings. Table 3 summarizes the final results of multiple regression analysis.This analysis found the *R*-squared value for this model is 0.422. This indicates that 42.2% of the variance in the dependent variables could be explained by the independent variables. It can also mean one unit of change in independent variables can cause a 0.422 unit of change in dependent variable. The *p*-values obtained from this analysis indicate that from the four independent variables, three of them are statistically significant and influenced brain drain as their *p*-value is below 0.05.

These variables are unattractive remuneration package, poor opportunities for career growth and poor quality of life. Poor job satisfaction is not statistically significant as its *p*-value is above 0.05 (0.551).

Based on these results, hypotheses H1, H2 and H4 are accepted since there are significant findings. Contrary to the expectation, hypothesis H3 is rejected due to insignificant findings.

Table 3. Results summary of multiple regression analysis

Independent variables (predictors)	Standardized coefficients	Significance
Unattractive remuneration packages (IV 1)	0.149	0.03
Poor opportunities for career growth (IV 2)	0.418	0.00
Poor job satisfaction (IV 3)	0.046	0.551
Poor quality of life (IV 4)	0.308	0.00
R-squared (R^2)	0.422	
Adjusted R^2	0.408	

8. Discussions

The findings of this study confirm there is a significant and positive relationship between unattractive remuneration packages and brain drain. This outcome could be due to the explanation provided by Locke (1983) in his study who stated that the individuals' desire to satisfy their physical needs or the basic necessities of life is caused by the root of the desire for equitable benefit.

The research has also managed to confirm there is a significant and positive relationship between poor opportunities for career growth and brain drain. This is because many of the respondents feel there are insufficient opportunities for career advancement, promotion and self-improvement in Malaysia. These respondents also believe that there are greater opportunities for career growth in other countries (Yuen et al., 2013).

Additionally, this study does not support the hypothesis which refers to Malaysian professionals migrating from Malaysia due to poor job satisfaction. From the percepctives of postgraduates, professionals unsatisfied with their jobs could either choose to opt for a career change or resign and join another organization within their vicinity or neighbouring state but would rule out migrating from the country.

This is because these professionals have moved up the Maslow's hierarchy of needs to satisfy their belonging needs by expecting a better working environment. They have already fulfilled their lower level needs; i. e. physiological coupled with safety and security needs. Therefore, they will not consider leaving Malaysia merely because of job satisfaction.

Lastly, the research has also proven there is a significant and positive relationship between poor quality of life and brain drain. Probably respondents feel that international migration of these professionals is not just limited to seeking better job opportunities outside the country; but looking for a better quality of living (Foo, 2011).

9. Limitations

While this research has made some valuable contributions, it is not without limitations. Due to time constraint, the researcher was not able to obtain a bigger sample size for the study. Response bias might also have existed as it depends on the respondents' inclination to participate in the questionnaire. It is also difficult to determine whether respondents' perceptions on the causes of brain drain were true or they were influenced by other external factors. Besides, different measurement for Likert Scales should have been used such as alternating scales of 1-5 and 1-7 for flow of questions. This would have been useful in minimizing common method bias.

Conclusion

This study serves as a crucial reminder to all parties involved, to take the brain drain phenomenon seriously. Proactive steps should be taken to prevent more high skilled Malaysians from leaving the country. This could be done by focusing on understanding the needs of Malaysian professionals' in terms of remuneration, career growth and quality of life.

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