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Harish Chandar a/l Ramesh Chandar

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ABSTRAK

Fokus kajian kuantitatif ini adalah untuk mendedahkan punca 'brain drain' di kalangan profesional Malaysia dengan mengenalpasti hubungan di antara empat pembolehubah bebas (pakej gaji yang tidak lumayan, peluang pertumbuhan kerjaya yang kurang, ketidakpuasan kerja dan kualiti hidup yang serbakala) dan pembolehubah bersandar ('brain drain') dengan mendapatkan persepsi pelajar sarjana dari Malaysia yang menuntut di institusi pengajian tinggi tempatan. Hal ini demikian kerana pelajar sarjana membentuk kelompok tahap pendidikan yang tertinggi di Malaysia, justeru menawarkan pandangan yang bernas. 'Brain drain' diklasifikasikan sebagai penghijrahan individu yang mempunyai kemahiran teknikal atau kepakaran dari negaranegara membangun kepada negara-negara maju yang menawarkan peluang pekerjaan yang lebih baik. Pembangunan Malaysia telah dibelenggu kerana fenomena ini telah terus merompak Malaysia daripada sumbangan golongan professional, dengan 308,834 berhijrah dari Malaysia pada tahun 2013. Sebanyak 170 borang soal selidik telah diedarkan melalui 'snowball sampling' dan 'convenience sampling' kepada para responden; iaitu pelajar sarjana yang menuntut di universiti di Pulau Pinang dan Kuala Lumpur. Dengan menggunakan SPSS, beberapa teknik statistik digunakan seperti statistik deskriptif, analisis faktor, analisis kebolehpercayaan, analisis korelasi dan analisis regresi berganda. Melalui analisis regresi berganda, didapati pakej gaji yang tidak lumayan, peluang pertumbuhan kerjaya yang kurang dan kualiti hidup yang serbakala menunjukkan hubungan positif terhadap 'brain drain' manakala ketidakpuasan kerja menunjukkan hubungan negatif.

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 the perceptions of Malaysian postgraduates studying in higher institutions in Malaysia. This is because postgraduates form the cluster of the highest education level in Malaysia, thus offering 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 of its professionals' contribution, with 308,834 high skilled Malaysians migrating from Malaysia in year 2013. A total of 170 questionnaires was distributed through snowball sampling and convenience sampling to respondents; postgraduates studying in universities located in Penang and Kuala Lumpur. By using SPSS, several statistical techniques were used such as descriptive statistics, factor analysis, reliability analysis, correlation analysis and multiple regression analysis. Through multiple regression analysis, it was found unattractive remuneration packages, poor opportunities for career growth and poor quality of life showed a positive relationship to the cause of brain drain while poor job satisfaction showed a negative relationship.

CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

This chapter comprises the research outline of the study by highlighting the background of the intended study and the problem statement. This is then followed by research objectives and research questions. Definition of key terms of major variables have also been included to assist the readers in their understanding. Significance of the study and brief overviews of the remaining chapters are also provided at the end of the chapter.

1.1 BACKGROUND STUDY

The effects of globalization and industrialization has seen the world population witnessed dramatic economic growth during the recent years. For each country, economic growth is important as it not only indicates its employment rate, but also its wealth and its standard of living. With a positively growing economy, businesses will be more open to the idea of hiring additional staff to help cope with the increased demand of products and services. The manufacturing sector will also require more workers as they experience an economic boom through an increased demand of their goods.

As a result of the economic growth, people are richer and will be able to increase their demands. They are also able to improve their living standards with an income rise. In short, positive economic growth benefits the nation as employment rate increases through creation of jobs. It is also a good indicator as it reflects the nation's improved wealth and living standard (Yellow, 2010).

Southeast Asia has been one of the fastest developing regions in the world. Countries like Thailand, Indonesia, Singapore, Vietnam and Myanmar are all luring foreign investment into the country in order to boost up the economy. Malaysia has also been actively involved in developing the country from an agricultural economy to become a high technology and well developed country. This positive development has allowed the standard of living to be improved as the people have more income to spend to improve their lifestyles.

Through extensive investment in education, Malaysia has been grooming a lot of professionals. The Malaysian professional pool has more than quadrupled from 487,000 in 1982 to 2,278,000 in 2010 (Talent Corp, 2012). This substantial investment in human capital development has produced Malaysians who are highly skilled and sought after both locally and internationally. This could be due to the high demand of these professionals in the market as they have a strong ability to adapt in challenging environment, to communicate in multiple languages and demands a reasonable wage rate (Jauhar et.al, 2011).

However, Malaysia is facing competition to retain its skilled intellectuals as other countries have also been experiencing rapid economic growth. Countries such as China have surprised with their economic boom after adopting more liberal fiscal and social policies by allowing foreign investment into their country. Singapore has been able to overcome their geographic disadvantage by embracing globalization, free market capitalism, education and strict pragmatic policies; enabling it to become a world leader in global commerce (Ping Zhou, 2012).

To make matters worse, globalization has forced many developed countries to increase their mammoth search for skilled intellectuals from developing countries which are of a cheaper option. Unavoidably, 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. The term "brain drain' can only be used when migration of highly skilled occurs due to economic reasons and is able to cause a harmful effect to the country (Shah, 2010).

Although this brain drain phenomenon is not new, it has gained significant attention and vast amount of interest due to rapid globalization combined with other contributing factors, such as economic, political and technological (Carrington & Detragiache, 1999). This phenomenon has also 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 found to be most noticeable in Southeast Asia and Malaysia is one of the Southeast Asia countries that have one of the highest emigration rates (World Bank, 2011). The latest data collected and reported by World Bank on the brain drain phenomenon in Malaysia was done in 2011. In this report, The World Bank defines "brain drain" as those who do not reside in Malaysia, have tertiary education and is more than 25 years old.

Table 1.1: 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 1.1, it is shown that 276,588 Malaysian professionals have left the country in 2010 for other developed countries compared to 184,014 in 2000. That is a staggering rise of 50% in ten years. From the 276,558 Malaysians, 44% or 121,662 of them have migrated to our nearest neighbors, Singapore. There has also been a rise of Malaysians migrating to other developed countries such as Australia, United States, and United Kingdom etc.

It is evident Malaysia has been facing an increasing exodus of talent throughout this period as they seem to be struggling in retaining their local talent. The recent study presented by Penang Institute's chief executive officer and head of economics, Dr Lim Kim Hwa at the forum of brain drain titled "Who Gains? Who Sacrifices?" revealed astonishing figures of 308,834 high-skilled Malaysians migrating from Malaysia for better prospects in year 2013 with 47.2% to Singapore, 18.2% to Australia, 12.2% to United States and the rest to other countries like United Kingdom and Canada. (Mok, 2014, Jun 22).

The reasons why Malaysia experiencing brain drain are varied and have been discussed at various platforms. As mentioned by ex-MCA president, Datuk Seri Dr Chua Soi Lek, various factors has contributed to Malaysia's brain drain, such as better pay, work environment, infrastructure and security (The Star, 2013, Aug 10).

This fact was further highlighted by Sarawak Chief Minister, Tan Sri Abdul Taib Mahmud. According to him, it was hard for Malaysians who leave for overseas market to return home as the packages offered by other countries, such as Australia and Singapore are very attractive as they offer permanent residency status (The Star, 2013, Apr 18).

Findings of a brain drain study was reaffirmed by Penang Institute's chief executive officer and head of economics, Dr Lim Kim Hwa when he found an overseas based Malaysian enjoys an average annual income gain (after tax) of RM 46,800 in terms of purchasing power parity. He also mentioned the annual total fiscal impact from brain drain was a gain of RM 2 billion and a loss of RM 8 million. It was also found Malaysia had an annual net remittance outflow of RM 19 billion (Ng, 2014, July 7). These deficits have been caused by the absorption of two million immigrants into Malaysia's population with 95% of these immigrants are low skilled (Lim et.al, 2014).

From an economic point of view, brain drain is a painful truth of international trade of human resources and would continue as far as it benefits the developed and powerful nations (Shah, 2010). By losing such qualified and skilled workforce, Malaysia will face difficulties in achieving high per capita income thus undermining its economic development (Fatimah et.al, 2013). If this situation is not addressed, it can lead to a loss of productivity due to inadequate human capital and loss of fiscal revenues from taxation of human capital (Daugeliene & Marcinkeviciene, 2009).

Another important implication from this brain drain phenomenon is the nation's investment in education of its citizen's will not lead to a faster economic growth if a large number of highly educated people continue to leave Malaysia. It will be also futile to reduce specific skill shortages through improved educational opportunities if adequate measures are not taken to contain this phenomenon (Carrington & Dettragiache, 2011). Therefore, it is disheartening if the brain drain phenomenon in Malaysia is not mitigated urgently as public funds are being wasted without recouping any investment.

With both Malaysian and Singaporean government looking into the possibility of setting up a high speed rail connection between Kuala Lumpur and Singapore in future, it will make more expatriates of Malaysians as more people from KL would actually start working in Singapore. In reality, the Malaysian government may be footing the bill for a scheme that accelerates the brain drain situation (The Star, 2013, Apr 18).

There has been various researches done by our local researchers to study this contagious phenomenon. Among them are Jauhar et.al (2009), Foo (2011), Jauhar & Yusoff (2011), Jian et.al (2013) and Yuen et.al (2013). This shows there is a growing interest from the society to understand the growing concern of brain drain.

Despite the efforts and initiatives taken by the government through the setup of TalentCorp Malaysia in 2011 and its Returning Expert Programme (REP) to lure back Malaysians who have migrated to return home and the National Economic Transformation Program to boost the national economy, the Employees Intention Report published by well-known recruiters, Michael Page International Malaysia, 2012 states 58% of employees surveyed intend to look for job opportunities outside Malaysia.

1.2 PROBLEM STATEMENT

Professionals are the scarcest resources of any developing country as they comprise the core workforce for the nation's sustainable economic development. These professionals not only contribute towards their own productivity, but also contributes towards the society's well-being and knowledge (Torbat, 2002). They are an important cluster and their views must be respected and considered beneficial for the nation's development.

However, one issue which has continuously robbed Malaysia of its professionals' contribution and is plaguing its development is brain drain. Brain drain is classified as the emigration of individuals with technical skills or expertise from developing countries to developed countries offering better job opportunities. This leads to the loss of skilled intellectuals who often emigrate due to better financial, economic, cultural, social and educational prospects (Kwok & Leland, 2001).

The brain drain dilemma has gained prominence and received substantial media coverage in Malaysia throughout the last decade as it has generated substantial interest and concern among Malaysians. Malaysian government has also begun to realize that brain drain has the potential to derail the country's productivity, economic and human capital development in future. However, this debate has been focusing on the emigration numbers and its impact on the Malaysian economy without articulating clearly the causes of emigration (Foo, 2011).

With all these negative developments, an overhaul of the current environment is needed to stem this brain drain phenomenon. This issue must be tackled seriously by the policy makers in Malaysia by proposing or implementing systematic changes to curb the further loss of human capital.

Therefore, the focus of this study is to uncover the causes of brain drain among Malaysian professionals by obtaining the perception of postgraduates studying in higher institutions in Malaysia. This is because these postgraduates form the cluster of the highest education level in Malaysia, thus their views are highly valued. They are induced to invest in education as they want to raise their expected return to human capital and prospects towards migration (Beine et.al, 2008).

1.3 RESEARCH OBJECTIVES

The review of existing literature identified several causes which contribute to the brain drain phenomenon in Malaysia. However, only four causes will be quantitatively analyzed in this study. In short, this study attempts to accomplish the following objectives:-

- To identify whether unattractive remuneration packages contributes to brain drain in Malaysia.
- To uncover whether poor opportunities for career growth contributes 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.

1.4 RESEARCH QUESTIONS

This study examines the relationship between brain drain phenomenon in Malaysia among Malaysian professionals with four independent variables, mainly unattractive remuneration packages, poor opportunities for career growth, poor job satisfaction and poor quality of life. In conclusion, this study attempts to answer the following research questions:-

- Are unattractive remuneration packages the real cause of brain drain n in Malaysia?
- Why are poor opportunities for career growth the cause of brain drain in Malaysia?
- To what extent does poor job satisfaction contribute to the cause of brain drain in Malaysia?
- Are poor quality of life the cause of brain drain in Malaysia?

1.5 SIGNIFICANCE OF STUDY

The Malaysian government's aspiration to elevate the country to high-income and developed status by 2020 will be threatened if they continue to suffer the loss of skilled workers abroad. With Vision 2020 rapidly approaching, Malaysia must embark on bold and broad-ranging reforms if it is to achieve this status.

While 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 literatures 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 will contribute to national policy debates and help Malaysia chart its path towards its Vision 2020 goals (Foo, 2011).

The Malaysian Government has always recognized the value and importance of human capital development by committing substantial resources in improving and enhancing its talent pool. Various measures had been undertaken to cultivate and improve the talent and capabilities of Malaysia's workforce. However, they are not reaping their fruits as many of these professionals choose to emigrate for better prospects.

Therefore, this study is significant for future research as it aims to establish the causes of brain drain in Malaysia by gathering the perception of postgraduates. In the past, there have been studies conducted to study this phenomenon, but only at undergraduate level. There has not been any studies done to gauge the perception of postgraduates on the brain drain phenomenon in Malaysia.

Postgraduates are an important cluster of our society as they can be made up of full time academic students or part-time working employees. They are investing in education in order to develop their human capital and with higher education, they become more accessible thus subjected to migration.

Therefore, it is important to understand these postgraduates perception on the cause of brain drain phenomenon. This study also theoretically contributes by making an attempt to understand and link the brain drain phenomenon with theories underpinning brain drain; i.e. Theory of Reasoned Action and Maslow's Hierarchy of Needs. This study is also significant for government as it attempts to identify the causes of this phenomenon by understanding the needs of Malaysian professionals' through postgraduates' perception.

It is extremely crucial for the policymakers to be firm and implement changes to curb this unwanted development and improve this worsening situation. Besides, this study also hopes to assist the Government in achieving the Economic Transformation Programme objective in transforming Malaysia from a middle income nation to high income nation by year 2020.

Finally, this study will also increase and expand the existing literature database on brain drain in terms of Malaysian context as most of the research papers regarding brain drain have been conducted in Europe, with little research being carried out in Asia.

1.6 DEFINITION OF KEY TERMS

1.6.1 BRAIN DRAIN

The definition is from the study done by Kwok & Leland (2001) whereby brain drain was used to explain the movement of skilled professionals from their native country to another country in order to seek more attractive opportunities.

1.6.2 MALAYSIAN PROFESSIONALS

It refers to the number of workers aged 25 and above having tertiary education (Foo, 2011).

1.6.3 REMUNERATION

It refers to the payment or compensation received for services or employment. This not only includes the base salary but also any bonuses or other economic benefits that an employee or executive receives during employment (Investopedia, 2014, Sept 2).

1.6.4 CAREER GROWTH

There are two ways of an employee to receive career growth opportunities. The first way, structural advancement is career growth opportunities through hierarchical advancement or promotion. The second way, content advancement is experiences within his aimed at improving job performance and work motivation (Weer, 2006).

1.6.5 JOB SATISFACTION

Job satisfaction reflects the employees' feelings about his job. It could also mean employee perceived difference between what he deserves and what he has from his job. In short, job satisfaction represents the employees' attitudinal response of employee towards its organization (Shahzad et.al, 2011).

1.6.6 QUALITY OF LIFE

In his study, Foo (2011) had termed one of his variable livability to define quality of life which is the difference between the Quality of Life Index (QLI) score for a particular country and that of Malaysia.

1.7 ORGANIZATION OF THE STUDY

This study is divided into five chapters. Chapter 1 is an introduction as well as an overview of this study. It covers the research background, research problem, research objectives and research questions. As for Chapter 2, it is a review of literature from previous studies to support the variables selected in this study. A proposed conceptual framework is formed and hypotheses pertaining to the variables are developed.

Chapter 3 will review the research methodology employed in this study in terms of research design, unit of analysis, measurement of variables and statistical analysis techniques used. Chapter 4 will review and analyze the results of the study while Chapter 5 will be a conclusion whereby it provides a discussion on the results obtained. This chapter presents the overall findings and implications of the research. Limitations of the study as well as suggestions for future research and conclusions will be explained here.

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter comprises the summary of selected studies on brain drain and its causes by various researchers. This is then followed by a summary of various studies to support the chosen independent variables in this study. This is then followed by explaining the theory associated with brain drain. Lastly, a conceptual framework is proposed for this study and the related hypotheses are developed.

2.1 BRAIN DRAIN

There have been many definitions of brain drain. The term was first defined by The United Nations as a one-way movement of highly skilled people from developing to developed countries that only benefits the host; developed countries. (Oberoi & Lin, 2006). Grubel and Scott (1976) classified brain drain as a person who has the "intention of holding stable employment in a country other than the one in which he was educated up to a specified, high level." However, in this study, the definition of brain drain is from the study done by Kwok & Leland (2001) whereby brain drain was used to explain the movement of skilled professionals from their native country to another country in order to seek more attractive opportunities.

According to Oberoi and Lin (2006), there have been various economic explanations offered about the occurrence of brain drain. The main perspectives are individual theory, new economics of migration, dual labor market, world systems theory and lastly, push and pull

migration theory. The individual theory has long regarded the migrant as a rational human being who identifies a destination that will offer the highest wage rates and best prospects. As for new economics of migration, it refers to the decision made by groups such as families or households, not just an individual. Dual labor market has suggested that migration is not an intermediate phase but is permanent, structural and necessary features of modern developed societies. As for world systems theory, it builds upon individual decision making and migrant networks. Lastly, in the push-pull theory, there are a range of factors which attract (pull) and repel (push) migrants to search for a better life.

2.2. RELATED STUDIES TO BRAIN DRAIN

There has been numerous researches done on brain drain. The study done by Carr et al. (2005) states talent flow is a process whereby economically valuable individuals migrate between countries, and is arguably a more important global career influence than international flows of personnel within global organizations. The term brain drain was rejected as too restrictive. Instead, the study focused on the psychology of migration and its motivating career forces.

There were also studies done by Martineau et.al (2004) which was based on qualitative studies in Ghana, South Africa and the UK. The aim of this study was to analyze professional migration in the health sector and its impact on health services in poorer countries. The relevant responsibilities at the global level and source and recipient country levels are then reviewed. It was concluded that that the situation is more complex than portrayed and better information was needed to monitor migration flows. Countries experiencing brain drain need to improve staff attraction and retention strategies while countries experiencing brain gain need to ensure that they do not become a permanent drain on health professionals from the developing countries.

There was also a study done by Baruch et.al (2007) on a sample of 949 management students from developing countries that came to study in the United States and United Kingdom and later developed an inclination to stay back, not returning to their homeland. The results from the study showed the perceptions of ethnic differences and labor markets, adjustment process to the host country, and family ties in host and home countries influenced the students' inclination.

A qualitative study was also carried out by Oberoi and Lin (2006) to understand the key factors behind brain drain from the perspective of doctors that have migrated from South Africa to Australia. With the migration of doctors, it was found that brain drain is posing a major problem as the population's health status in South Africa is affected. This affects the productivity and welfare of the population. The actual beneficiary of this situation is Australia. It was also observed in this study that push factors play a much greater role than pull factors.

The studies done by Tansel & Gungor (2002) evaluated the findings of a survey conducted during the first half of 2002 on the return intentions of Turkish students studying abroad. Factors such as political instability, lower salaries and lack of employment opportunities and preference to live abroad were cited. In addition to these factors, several other features of Turkey's political economy were considered important in explaining the Turkish brain drain.

There have been some research done to examine the factors causing brain drain in Malaysia. A study was done by Jauhar et al. (2009) among 150 accounting students and professional accountants to investigate the factors leading to brain drain of accountants in Malaysia. The study found that higher salaries and international exposure are the positive factors related to brain drain while improved living standards, promising job opportunities and ease of immigration procedure was not considered as significant factors in the study.

The studies done by Jauhar and Yusoff (2011) investigated the intentions of Malaysian professionals to leave the country. They modeled their study on the reasoned action theory and identified factors of brain drain among architects and accountants by proposing a research model representing the 'push' and 'pull' factors. From the study, the propensity level of these professionals to leave Malaysian was identified.

The studies done by Foo (2011) seem to indicate that the brain drain in Malaysia may not be as acute as popularly believed. However, Singapore still remains the destination of choice for ambitious, adventurous or disillusioned Malaysians. This is partially due to close historical and geographical links, and partially the result of deliberate strategies to target and court Malaysia's best and brightest with promises of academic scholarships and attractive career prospects. By exploring the key determinants of high-skilled migration, Foo finds that high income levels in destination countries, livability and religious diversity, proximity, and the English language are associated with higher emigration rates.

From the 194 Malaysian migrants surveyed by Foo, 80 per cent felt that their professional goals had been met through migration. 70 per cent of the respondents were unsure whether they would return home to Malaysia. This could be due to stronger social connections made during their long stay in the host country.

The studies done by Jian et.al (2013) explored the factors that influence individuals to leave Malaysia. The aspects of job satisfaction, personal safety, extreme work stress, and human resource policy have shown significant influence on brain drain. However, the studies showed personal behavior did not influence people to leave home country and work in overseas. Hence, to improve the findings, it was suggested that in-depth qualitative research such as focus group be conducted.

There were also studies done by Yuen et.al (2013) examining the antecedents influencing the propensity of Generation Y adults in Malaysia to work abroad. Teresa Sohoch (2012) classified Generation Y as individuals born from 1980-1996 while Generation X refers to individuals born before 1980. Among the antecedents studied in this study were less attractive compensation, poor career prospects, sense of social injustice and quality of life.

However, none of these studies in Malaysia till date have captured nor gathered the opinions of postgraduates. 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.

Besides, postgraduates are expected to be more matured in the understanding of brain drain as their perceptions might be based on prior experiences and they are not merely looking at extrinsic factors, such as financial disparity. Therefore, this research shall aim to plug the gap by gathering their perception on the cause of brain drain among Malaysian professionals.

2.3 CAUSES OF BRAIN DRAIN

2.3.1 UNATTRACTIVE RENEMURATION PACKAGES

A remuneration package usually includes salary or wages but may also contain other benefits or rewards such as bonuses and incentives, handphone, laptop and allowances. Working out a good remuneration package is essential to attract and retain employees. Remuneration packages should suit the business situation and reflect the responsibilities and duties of the position and the skills and abilities of the employee. To attract and retain staff, it is also important to consider current market rates being offered for similar positions.

Table 2.1 displays annual net wages in Malaysia compared to other countries in year 2013. All the wages shown in the table have been adjusted for income tax and purchasing power. From the table, it is evident Malaysia is still very much a country with low labour costs as its wages have been lagging far behind from the developed countries such as Singapore, United Kingdom and Australia. A professional in Singapore is able to earn almost 2.5 times the wages in Malaysia. Interestingly, wages in Singapore are higher than those in UK and Australia for managerial and professionals occupations. However, the opposite is true for medium- to low-skilled jobs (Penang Monthly, Jun 27, 2014)

Table 2.1: Annual net wages in Malaysia compared to other countries, 2013 (Penang Monthly) (Source of Data: Ministry of Manpower, Singapore; Department of Statistics, Malaysia; Office for National Statistics, UK; Australian Bureau of Statistics, Malaysia)

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
Technicians, associate professionals	37,761.00	14,465.67	36,714.01	30,764.81
Clerks	24,434.18	9,090.78	26,077.60	27,135.52

According to Kelly Services managing director, Mellisa Norman, salaries in Malaysia in the mid-tier management are generally about 10-30% lower than that in Asia-Pacific (Apec) counterparts such as Singapore, Hong Kong, Australia. In fact, the exchange rate alone has been enough to entice Malaysians to work overseas. She added further on the fact that fresh graduates in Singapore are commanding a starting salary of \$ 2,500 while many Malaysian graduates are still hovering between RM 1,800 to RM 2,000.

This was because the graduates from Singapore are of higher quality, having graduated from the world's top universities; Nanyang Technology University and National University of Singapore while most Malaysian graduates come out lacking in skills. This fact was further substantiated by Malaysia Productivity Corporation's (MPC) 2012 report. This report claimed Malaysia's productivity is 3.8 times lower than Singapore's productivity. In other words, 3.8 employees in Malaysia is required to complete the same task a single employee in Singapore is to accomplish (The Star, 2013, Jun 2).

Majority of skilled and educated emigrants in Malaysia choose Singapore to earn a higher income. This is due to the huge discrepancy in the relative wages offered. Although a Malaysian graduate may earn the same salary in Singapore, the high exchange rate of 2.5 times is a strong attraction for most professionals to emigrate (Talent Corp, 2012). For professionals who leave Malaysia to take up expatriate packages, they are given attractive compensation packages which include cost of living allowances, entertainment allowances and other work related benefits. These enables many of them find comfortable living as the cost of living has been significantly lowered.

There have been various researches done to support this variable. Among them are the research done by Jauhar et.al (2011) whereby Abraham Maslow's theory of hierarchy was employed in understanding the reasons that is driving the brain drain of accountants in Malaysia. There are five levels of need beginning from physiological, security, social, esteem and lastly, self-actualization. According to Maslow, physiological needs referred to basic needs for survival such as food, water and shelter. Once this need have been satisfied, people will move up to the next level of needs, i.e. security. Thus, high salary and benefits are among the components which will satisfy this need it makes a person financially secure.

In a study done by Oberoi & Lin (2006), poor wages and remuneration were seen as a major factor for the doctors in South Africa to migrate. The study also claimed most of the migrants prefer Middle East rather than Europe if they are migrating solely for economic gain as the Middle East offer higher wages and greater purchasing power, coupled with protection against taxation.

From a study done by Gaiduk et.al (2009), it was implied that the firm is underestimating the employee's contribution or lacks the resources to match market growth if the employee's remuneration is below the market rate. This casts a negative influence on the employees' perception on their organization and motivate them to search for brighter options elsewhere.

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

2.3.2 POOR OPPORTUNITIES FOR CAREER GROWTH

The career growth components are similar with the existing literature on career plateauing, which suggests that individuals are either structurally plateau or content plateau. In structural plateauing, an individual is unable to rise further in the organization's hierarchy whereas in content plateauing there is a low possibility of increased responsibilities or challenges associated with one's current job (Weer, 2006).

In today's times, career growth matter 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.

Among the Asian countries, Singapore is the main destination of choice followed by China. As Singapore continues to establish itself as a key regional business hub, the number of employment opportunities on offer for skilled and experienced professionals will increase, particularly within multinational companies looking to expand their operations throughout the region. This will prompt Malaysian professionals to take advantage of the opportunities available in Singapore, as well as the prospect of increasing their income (Michael Page, 2012).

From the study done by Jauhar et.al (2011), it was found that there are more areas of opportunities in the top accounting firms in the developed countries, rather than in Malaysia. As for small and medium accounting firms in Malaysia, they are only serving clients of small and medium industries.

However, this situation is different in China and Singapore as these firms interact not only with local but international clientele. Besides, the study also revealed the local accounting firms in Malaysia do not have programs to support career progression and do not communicate career direction to their employees.

There have been various researches done to test the validity of this variable. Among them are the research done by Yuen et.al (2013) on the propensity to work abroad among Generation Y working adults in Malaysia. The result of this research indicated that career prospect is the major factor as majority of the respondents claimed there were insufficient opportunities for promotion and self-improvement in Malaysia.

From the research done by Jauhar et.al (2011), the Herzberg's two-factor theory was used to portray the different factors as the primary causes of job satisfaction and job dissatisfaction. Motivator factors are sources of job satisfaction while hygiene factors are sources of job dissatisfaction. Hygiene factors are often associated with the job context as they relate more to the working environment than the nature of the work itself. As for motivator factors, they are related to the job content. Motivators can be categorized as expanded job scopes and career advancement.

A study was also done by Kurka et.al (2008) on the brain drain of young Austrian researchers. Among the pull factors to entice these professionals to migrate was the opportunity to work with world renowned scientists at prestigious research institutions offering top research infrastructure in the chosen area of specialization. There is also an added push element as there is always a potential for this researchers to return to their native country and have better job opportunities.

A study was also done by Daugeliene and Marcinkeviciene (2009) on the key pull – push factors related to brain drain in Lithuania. The findings of the study confirmed that highly skilled people in Lithuania are searching for self-fulfilling career opportunities and professional appreciation. Unfortunately, there is a little opportunities and lack of professional appreciation received by these professionals.

An online survey was also done by the World Bank in 2011 to get a more structured response among Malaysians on the brain drain phenomenon in Malaysia. The survey results indicated career prospects (66%) was the top driver of brain drain. This was followed by social injustice (60%) and compensation (54%) (World Bank, 2011).

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

2.3.3 POOR JOB SATISFACTION

A survey was conducted by Malaysia's leading job site, JobStreet.com in September 2012 on a total of 1145 professionals. The survey titled Employee Job Satisfaction in Malaysia was aimed at studying the factors causing poor job satisfaction among Malaysian employees. The results of the survey indicated 78% of the respondents were not happy with their current job. While poor salary could be often perceived as the main culprit of employees feeling disgruntled, the results of the survey indicated otherwise. The top reason most employees felt unhappy at work was because of poor job satisfaction. Therefore, the results of this survey indicate poor job satisfaction is a major factor among Malaysian professionals and should not be taken lightly.

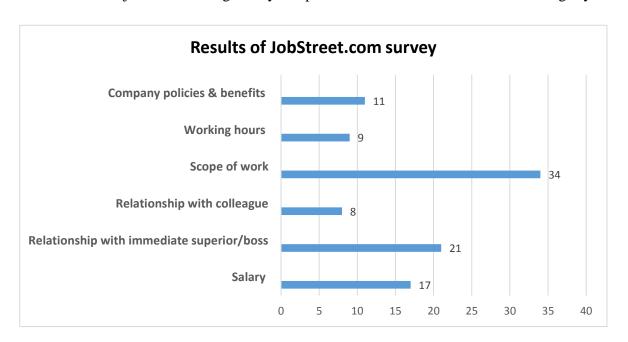


Figure 2.1: Results of JobStreet.com survey (JobStreet, 2014, Aug 2)

Poor job satisfaction has always been linked with high job turnover. Various studies have been done to test the validity of this variable. A study was done by Currivan (2000) to analyze the causal relationship between job satisfaction and organizational commitment. This study also distinguished between satisfaction, commitment and turnover. Turnover symbolizes the employees' behavior and is an outcome of the employees' satisfaction and commitment. Strong positive correlations from the results indicated an employee with high job satisfaction will demonstrate strong organizational commitment.

From a study done by Oberoi and Lin (2006) on the migration of South African doctors to Australia, it was found job satisfaction was a major push factor as many of them were not happy with poor management and lack of work procedures. New employees had little orientation and there was also a lack of performance appraisal.

Shah (2010) had also claimed in his work, citing the lack of respect of the professionals as a contributing factor in accelerating Pakistan's brain drain as he lamented the fact that many highly skilled software engineers are leave Pakistan as they are reporting to poor skilled manager and are often faced with ridicule whenever they present any technical solutions to their managers.

A study was done by Gaiduk et.al (2009) in predicting employee attachment in organizations based in Lithuania. The respondents in this study, employees would want their organizations to provide more training and promotion opportunities. Many of them have also expressed their desire to be given more authority to perform their tasks.

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