



**A QUALITATIVE STUDY ON THE
PHENOMENON OF BRAIN DRAIN
AMONGST YOUTH IN MALAYSIA**

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ABSTRACT

Brain drain is a global phenomenon that describes talent lost when highly-skilled workers exit the country for any potential push-pull factors. This is deleterious to the developmental progress from sending countries which is generally from small and poor nations, aside from battling poverty, on top of that they still struggle with brain lost that brings about a chain effect of workforce imbalances which later causes more economy and societal problems. Meanwhile, Malaysia being one of the sending countries in Asia, yet again it faces issue of incapable of retaining local talent as well as attracting foreign talent. While Malaysia aims to escape the second-world chasm and join the league of high-income nations by 2025 but one of the deterrents seems to be talent mobility when many Malaysians are seen emigrating to neighbouring country, Singapore at a worrying rate. With more professional intention to exit in the country in which typically influenced by monetary purpose, hence Malaysia should not turn a blind eye to the occurrence of brain drain. As many past studies in regards with brain drain were discussed in quantitative mass result, but an in-depth study on this matter is however only scarcely available. Thus, qualitative research method will be applied in this study in order to fulfil the limitation of previous papers, at the same time, to improve or extend the existing push-pull theories using Maslow's Hierarchy of Needs and Theory of reasoned action to justify the result. The fundamental purpose of this paper remains at this core focus which is exploring the phenomenon of brain drain, while the focus group belongs to graduates due to their growing interest in outbound prospects. Through them, a study of migration intention will be acquired in this paper using thematic analysis method.

Keywords: *Brain drain, brain drain in Malaysia, talent lost, graduates, migration intention*

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CHAPTER I : INTRODUCTION

1.1 Research Background

The term “brain drain” is commonly known as human capital flight which is the international migration of skilled workers - professionals in respective field with at least a bachelors’ degree. The impact of phenomenon of brain drain has become a rising issue since the 1960s, the transference of highly skilled workers brings about economic shift in the long run and it is likely to hurt the sending countries’ economy in which later cause their financial market to be small and associated with externalities due to growing rate of talent output (Grubel & Scott, 1966).

The focus on brain drain is usually found and studied within the area of highly skilled group, for low-skilled workers however do not exempt from the impact of brain drain, as it has been affected as well, only to a lower percentage. For example, from 1990 to 2010, there was a significant grow of migration across countries that in turn had shaped the landscape of global talent mobility with an increasing of 130% in highly-skilled workers, while low skilled migrants who are primary educated stood only 40% at that time (Kerr, Kerr, Ozden, & Parsons, 2016). According to Kerr et al. (2016), the trend of migration of talent has shown notably in Organisation of Economic Cooperation and Development (OECD) countries, such as United States, United Kingdom, France, Germany and etc. These countries attract large quantity of highly-skilled workers, specifically from non-OECD countries which comprises 85%

of the total migration number at that time. The data was presented evidently to show the emergence of brain drain at its full swing mainly in non-OECD countries due to limited access to education and fiscal resources to provide training, especially for high-skilled workers in their respective professional field.

DIAGRAM 1 :

Quantifying the number of migrants from their origin and their choice of destination in 2010

Migrants coming from:	Migrants living in:		
	DEVELOPING	HIGH-INCOME OECD	HIGH-INCOME NON-OECD
DEVELOPING	74 MIL (43.1%)	73.3 MIL (42.8%)	24.2 MIL(14.1%)
HIGH-INCOME OECD	5.1 MIL (13.6%)	31.1 MIL (83.35)	1.2 MIL (3.1%)
HIGH-INCOME NON-OECD	1.4 MIL (20.9%)	5.1 MIL (74.1%)	0.3 MIL (5 %)
TOTAL NUMBER	80.5 MIL	109.5 MIL	25.7 MIL

Source: The World Bank. (2011). Malaysia Economic Monitor. Retrieved from <http://documents1.worldbank.org/curated/en/282391468050059744/pdf/614830WP0malay10Box358348B01PUBLIC1.pdf>

Meanwhile, Malaysia is one of the non-OECD countries where economy and infrastructural development are classified as middle to high-middle income group. When facing on-going progress of nation building, the lack of human capital could pose as barricade for the country reaching its end goal. In this case, Malaysia is not free from the phenomenon of brain drain. According to Ong (2020), Fitch Solutions stated that the chronic brain drain in Malaysia hampers the country’s economy while the motivating factor is due to race-based affirmative action policies and stalled reforms. It is explained as the planned and promised reformation by government is unlikely to happen due to political instability lately which causes more politicians

inclination in appeasing the majority group while non-Malay will continue to seek opportunities in overseas. Aside from racial discrimination and lack of meritocracy as the push factors of brain drain in Malaysia, the encouragement by parents to stay put in foreign countries upon finishing studies for out-bound graduates as well as motivated by social pressure to look for a job abroad play a role in actuating brain drain (Dass, 2020). As many past studies on brain drain in Malaysia were mostly done quantitative research, thus, in depth finding in this case matter has failed to achieve. According to Yeow, Ng, Chin, and Boo (2013), they suggested that qualitative research on brain drain study in Malaysia should be done in the future, as the potential motivating factor such as personal behaviour which varies from everyone has yet to gain in-depth understanding. Hence, this study serves even more urgency in view of the extensive underlying influences, which is also considered as push-pull factors of brain drain in Malaysia.

1.2 Understanding Brain Drain

The perception of the brain drain can be varying from different aspects in an origin country, what is considered to be fundamentally beneficial or detrimental to a country is heavily discussed as some may decipher brain drain as disadvantageous to a country's economy, however, viewing from another angle if a country is able to retain and attract talent, as a return, it will only bring good interest for the country's human capital count. Brain drain is constantly being projected as impediment of nation's development but it could be a form of blessing in disguise. Stark, Praskawetz, and Helmenstein (1997) argued that the opportunity to work in foreign country would drive return investment in home country. This phenomenon is known as brain gain,

aside from new skills that are acquired from foreign countries which later brought back upon return, interestingly enough, a small percentage of low-skill workers also contributed their skill sets to the idea of brain gaining in poorer countries. It has been observed that, since the happening of brain drain, workforce in poorer countries are increasing incentives to proper invest in human capital formation.

Beine, Docquier, and Rapoport (2008), agreed that brain drain is happening ubiquitously and it is understandable to have winners and losers along the process and there are no available data that solidly proves such phenomenon only brings disadvantage to a country, it is a traditional understanding of brain drain which often being viewed as predation when developed countries are stripping away talent or human resources from developing countries. Though the concept of brain gain was introduced but it has however been diminished when brain drain on an aggregate level has shown more significant negative effect on poor countries rather than any good and it is likely to generate a net brain lost in longevity (Schiff, 2005). Moreover, many studies in the past provided data for return migration in regard with brain gain were too small to the extent of being negligible. Hence, it has become a debate whether brain gain can be in the form of brain drain, some said there is a the positive growth in brain gain, when the empirical information was observed between the 1980s and 1990s, it will be only matter of time before brain gain to present more prominently (Docquier, 2014).

Despite the reverse effect of brain drain as mentioned might result in many instances of brain gain in poor countries. It has however been subsided by the scale of its impact that has affected many crucial aspects for a nation building. The degree of how

detrimental brain drain to a country is difficult to measure or encapsulate every components into what makes a country thrive or fall. Hence, the negative impact of brain drain has been translated into viewing welfare effects of a country, the facet that have been studied here includes national income, level of emigration, level of educated manpower, unemployment and income distribution. All of these act on the effect of brain drain due to the lost of work talent which further creating a sense of inadequacy, a void in workforce (Bhagwati and Hamada, 1973). For example, brain drain has impacted greatly in Pakistan, with estimated 25% loss of medical personnel, this is considered serious as many professional workforce require longer recovery time to regenerate new human resource, especially in the medical field. Similarly in the Pakistan's heritage buildings management, only 6 professionals were recorded amongst the 145 millions populated nation (Kaukab, 2005). According to Docquier (2014), the migration of scientists, doctors and engineers are heavily from developing countries as brain drain is an inevitable by-product of poverty. Based on the evidence of brain drain from past studies, it seems to be directing the likelihood for the occurrence of brain drain in developing countries but what about on a local perspective, in Malaysia where it fulfils the fitting criteria of brain drain.

1.3 Global Perspective : Brain Drain

You may wonder how extensive is brain drain, from what is commonly perceived as the exit of work talent from developing countries to Economic Cooperation and Development (OECD) countries or non-OECD high income countries to seek for better job opportunity and living standard. Contrary to that, there is still a small percentage of migration effect even for OECD countries such as Italy, Germany, and

Poland, despite only making up 10-20% lower magnitude than countries like China and India (Dunnewijk, 2008). According to World Bank (2011), migrants from high-income OECD or high-income non-OECD countries comprises approximately 40 million out of 215 million of estimated total migrants number, such small number does not account for migrants from developing countries, standing 171 million out of the total which eliminates the primary focus of brain drain on migrants from high-financial status.

To better understand brain drain in a bigger picture, it is an omnipresent global phenomenon where many countries are involved, while the only disparaging factor would be the extent of brain drain effect that one country may suffer. Naturally we can understand that some countries with big population pool would not be affected as much as those small developing countries that are still struggling with poverty and shortage of highly-skilled workers. Countries such as Brazil, Russia, India and China (BRIC) view the number of brain drain as trifling with 2.2% in Brazil, 1.5% in Russia, 4.3% in India and 3.8% in China as compared with 24.5% in Vietnam, 24.8% in Singapore and 32.5% in Hong Kong (World Bank, 2011). In spite of losing professional talent in origin country, yet it does not pose as a major issue. It is because densely populated countries are able to offset their lost value with emerging talent in the market. Developing countries, on the other hand, suffer dispersion of highly skilled workers mainly in regions like Caribbean, Central America, Pacific Islands and Sub-Saharan Africa (Docquier, 2006).

According to Docquier. (2006), there is a positive trend of migration rate for skilled workers ever since the past decades. Income differentials and job opportunities have

always been their forefront concern, with sizeable number of developing countries that are still suffering skilled emigration beyond the sustainable threshold of brain drain. On the global peripheral, globalization acts as the supply factor for brain drain in congregating global talents. And the demand factor happens when many host countries practised selective immigration policies to create competitions in attracting talent. It has been clear that brain drain appears to be a threat to small, poor or developing countries. Nations like Guyana, Haiti, Grenada, Jamaica and St. Vincent suffer more than 80% of migration rate, mainly to United States (Ozden & Schiff, 2006).

For the past two decades, the situation of human capital flight also happens in ASEAN like Philippines, Thailand and Malaysia, within the tertiary educated group. With the recorded data of outward migration in Philippines to support the statement, out of 4.2 million of total migrants, majority are healthcare workers (Joyce & Hunt, 1982). Similarly this happened in Ghana as well. The Ghanaians have left the country for better future due to poor condition of education, health and infrastructure (Dadzie, 2013). Besides, Thailand also suffers talent lost, with approximately 800,000 skilled migrants during the era of heavy dependencies on sciences and technologies, in the end, Thailand opted for adding more numbers to foreign skilled labour as the solution to the problem (Ullah, 2018). Talent mobility causes sending countries to spare additional funding to recover brain lost which is viewed as unnecessary when funding could have been given to infrastructure or facilities for citizens to acquire better education, job security and overall better living standard.

The introduction of ASEAN Economic Community (AEC) in ASEAN regions might have been the cause of increase number in brain drain. As AEC is an implemented integration agenda that aims to create opportunities in the market for goods, services and skilled labours in ASEAN to draw investment from its within nations to better contribute a prosperous flow of economics (ASEAN Economic Community, 2017). Hence, AEC may seem to be the financial support system to ease economic difficulties in poorer areas in ASEAN by expanding migration process but from a negative hindsight, unmanageable migration rate would only exert more financial and workforce pressure to a country at an underhand situation.

In South East Asia, one of the prominent skilled migration can be observed from Malaysia to Singapore. According to Ziguras and Gribble (2015), Singapore has been a recruiting ground for professional workers since the 1990s, hence it is classified as a global hub in commercial, education, research and development work. Malaysia is listed as the top migrants in Singapore, holding 103,318 in total out of 297,234. When we place the recorded data across all nationalities around the world, the percentage of Malaysian migrating to Singapore is significantly high as compared with others in which cover almost half of the total amount. Therefore, the effort of looking into the issue cannot be ignored in Malaysia.

1.4 Brain Drain : Malaysia

Malaysia's measure in tackling brain drain is described as reactive rather than proactive - an issue that leads to a diminishing number of workers, all ranging from

low until high but professional-skilled workers are the primary focus from its impact. (Narayanan & Yew, 2014). Without proper implementation of migration policies in home country, the number of migrants seems to be increasing. For example, during 1991, an economy recession happened at that time, many manufacturing employers were struggling labour scarcity. According to Ziguras & Gribble. (2015), Malaysia is in a close and diplomatic relationship with Singapore in its transnational collaboration between tertiary institutions. Due to the proximity from both countries, Malaysia makes up the most percentage of inbound students. Hence, it has undoubtedly proven the assumption of the likeliness in working at foreign country upon graduation which cause brain drain in the making. Malaysia does not exempt from the influence of global human capital flight, with similar predicaments that many developing countries are facing. While Malaysia generally requires more attainment method due to multi-ethnic complexity as well as race hierarchy. Though Malaysia is classified with well-rounded international economy, but there is still a need to provide protection measure to the highly-skilled workers (Siew, 2013). And it has been expected that Malaysia to need more professional labours and better education system than its existing ones to fulfil the desire in achieving development in a manufacturing-based nation.

Malaysia is a melting pot, as multiracial and multicultural are known to reside at this tropical land, however, it is not that magical when corruption and race issue have caused many furores over the years. Many civilians have proposed the ideal political stability promotes social development, intervention of corruption and stern leader in providing beneficial political system (Looi, 2013). In Looi's published result in researching political stability in Malaysia, many interviewees mentioned the unstable

political environment in Malaysia, namely related to racial discrimination and corruption in government. Hence, it is no brainer for highly-skilled workers to shift direction in a foreign path in search for better standard of living. This has also been supported by Fong and Hassan (2017), based on their research on factors contributing brain drain, the result showed political instability was the main reason for skilled-workers to leave the country. Another push factor of labour mobility is the proximity from home country. In another word, the closer the distance from an origin country to a high-economy country, the higher the likeliness for highly-skilled workers to migrate for a number of reasons.

DIAGRAM 2 :

Size of the diaspora (age 0+), by country of destination and over time in Malaysia.

COUNTRIES	1980	1990	2000	MOST RECENT	
SINGAPORE	120,104	194,929	303,828	385,979	In 2010
AUSTRALIA	31,598	72,628	78,858	92,334	In 2006
BRUNEI	37,544	41,900	60,401	60,401	In 2000
U.S.	11,001	32,931	51,510	54,321	In 2005
U.K.	45,430	43,511	49,886	61,000	In 2007

Source: The World Bank. (2011). Malaysia Economic Monitor. Retrieved from <http://documents1.worldbank.org/curated/en/282391468050059744/pdf/614830WP0malay10Box358348B01PUBLIC1.pdf>

According to Docquier, Lohest, and Marfouk (2007), they explained the geographical proximity is the variable for brain drain, as many are concerned over the monetary cost to migrate to a further place which requires higher cost. Based on diagram 1 information curated by the World Bank (2011), it shows the list of countries that

Malaysia experiences diaspora from over the years, while Singapore stood the highest amongst other countries. Hence, we can conclude that proximity does play a role in spectrum of brain drain study. Therefore, Singapore has become the prospective future and reliable route for highly-skilled Malaysian to migrate to. The diaspora in Malaysia is densely concentrated in neighbouring country, Singapore since the 1980s, it has been proven the collected data from Malaysia Economic Monitor across three decades, with the number of migration to Singapore stands as the top of the list and it is responsible for 46% of global diaspora in Malaysia which is almost half of the sample candidate, amounting to 657 thousand in total. Amongst all the potential migrate locations for Malaysians, Singapore is undoubtedly the first, and second favourable choice is Australia, while Brunei, United States and United Kingdom come as the following (World Bank, 2011). These countries suggest to be the primary key figures in view of brain drain in Malaysia as they account for almost 80% of the total migrants. Contrary to popular belief, the labour draining from Singapore was not among the highly-skilled group but rather in the low-skilled bracket in the earlier days. It is explained by the difference in skill intensity required by a country at that time. In brief, the degree of labour force demand for a country is different from time to time. For example, Australia used to be the top migration country back in 1990s but since the emerging economy from Singapore, a sharp rise of diaspora percentage was noticed from 19% in the previous decade to 40% in 2000s (World Bank, 2011).

1.5 Problem Statement

The existential brain drain effect has brought impact to social and nation building. According to World Bank DRG (2019), the percentage of global migration had

increased from 2.8% in 2000 to 3.5% in 2018. It has been estimated by 2030, the ratio of 65 year old and above to 15-24 year old in Japan will be 3:1, 1:7 in Nigeria and 1:2 in India. These figures are important to view labour-market imbalances such as in developing nations, by 2023, the growing pool of younger group will reach 552 million as they struggle to be employed due to the surge of number and lacking career opportunity in home country which latter resort to emigration which is the case of brain drain. It is indeed a conjoint global effort in alleviating the impact of talent loss and improving the potential reversal effect of brain drain, which is brain gain. It has been treated as the alternative insight in perceiving brain drain and its probable benefits such as changes in incentives, remittance and adaptation of human capital formation from origin country. However, most of the information were shrugged off due to limited empirical evidence (Commander, Kangasniemi, & Winters, 2004). The positive aspects of brain gain have been abated due to the predominant negative impression of brain drain in past studies, since brain gain can only be attained evidently in a longevity, therefore, its positive impact are considered implausible. The seriousness of brain drain was proven in U.S. migration data when 1.5 million qualified professional workers from developing countries were found working in Western Europe, America, Australia and Japan, and there were 500,000 students studying abroad but only one-third of them were willing to return home upon their graduation (Carrington & Detragiache, 1999). In order to highlight graduates being the key group in brain drain, same goes to India, among 27,000 graduate engineers about 68% of them would go abroad but the return rate is only 15%. Hence, the solution at hand is to intensify retaining effort such as allocating more Research and Development (R&D) in universities before more professional flight (Singh & Krishna, 2015).

Coming to this decade, talent mobility seems to be focusing on South Asia and Sub-Saharan Africa (World Bank DRG, 2019). Unfortunately, the occurrence of brain drain does not spare in Malaysia, with fitting criteria of being a small developing nation and major push proximity factor from Singapore, the number of diaspora can only be expected to increase over the years. Foo (2011) said the closeness between sending and receiving countries play a role in Malaysian intention leave the country, with English language is also associated with higher emigration rates. Therefore, it is more necessary than ever to treat brain drain as an alarming problem as human capital is an intangible resource for a country, it is a country's commodity which plays the imperative role in influencing the earning, income distributions of an individual and country's overall development (Thaib, 2013). Singapore is one of the favourable options for Malaysian to emigrate due to closeness as well as similar language use. However, Flanja and Nistor (2017), argued that there is no correlation of emigration choice with practised language from host countries. Hence, emigration of Malaysia talent to Singapore does not come as the only worry now.

Brain drain has been brought up as an issue because of weaknesses in Malaysia's structural economy in which causing low demand for skilled workers and fail to meet expected salary wages in professional field. According to Harnoss (2011), Malaysians reveal their intention to emigrate abroad in seeking comfort in life that provides economic, political and social security. How brain drain is being addressed, is fundamentally bringing focus on economy development, but it is only just a fraction of solutions to resolve this complex issue. Indeed, poverty is the root of the problem, but ineffective attempts in retaining and attracting talent in Malaysia could also be

worsening the case. Being a multiracial country where everyone from every race has not benefited the same, hence, the unstable political environment in Malaysia spurs emigration rate as well (Fong and Hassan, 2017). The talent mobility is often motivated by higher pay check which is explained as the chase for better living standard that only OECD countries are able to offer. Hence, income differential becomes the defining point in brain drain effort. For example, Malaysia suffered exchange rate shock since the late 1990s during Asia's currency crisis (Ozden & Schiff, 2006). With more indulgences such as travelling, food and lifestyle choice, it is expected to see more young talented workers to emigrate for higher salary which is double or triple the amount that they receive from Malaysia due to currency disparity. Dhesi (2020), has supported such statement, mentioning there is a talent crunch in advertising field in Malaysia causing talent mobility mainly to Singapore and China due to pull factor of lucrative prospects.

For Malaysia's first and second approach in resolving brain lost had started in the earlier days, agencies such as Technology and Innovation (MOSTI) and Malaysian Development Corporation (MDC) were established in 1995 until 2000 in means of attracting talent from abroad. However, the result turn out to be a failure, with only one return in the first attempt and second attempt was not any better, only 200 took the offer. Later, TalentCorp has joined forces under Prime Minister's Department to overcome this issue (Sidhu, 2011). Talent Corporation Malaysia (TalentCorp) was introduced in 2011 as an effort to retain existing talent and attract them to return from foreign countries (Talent Corp, 2020). The implemented intervention by TalentCorp are Returning Expert Programme (REP), Scholarship Talent Attraction and Retention (STAR) and Strategic Reform Initiatives (PEMANDU) with the objective to woo

foreign talent and subdue brain drain damage in retaining local talent. However, these policies have yet to reduce migration rate in Malaysia, it is thus often questioned for its effectiveness. For example, as suggested in World Development Report (2015), the policies implemented by Malaysia are mostly done in reducing emigration at macro level, but for specific highly-skilled target intention to migrate has yet to achieve. Hence, it has proposed the behavioural intervention approach in understanding brain drain phenomenon in Malaysia.

It is needless to say that the goal for Malaysia in achieving high-income nation is too far-fetched when talent workers are still in dire need. The age of technology is at our door, with knowledge and information that are easily to be acquired through media, thus, its influences cannot get unnoticed. For example, the era of digitalization influences stimulates migration decision due to exposure learning about potential career prospect in overseas as well as exaggerated form of attraction as projected on media (Bhardwaj, 2017). Globalization acts as the catalyst in human capital flight with increase number of labour mobility as of late which poses as a threat for Malaysia transformation ambition (Talent Corp, 2020). From the same report, it has concluded the number of weeks needed to fill professional vacancies in sending countries, the result stated that Malaysia requires an average 6 weeks as compared to 2 weeks in Indonesia and 4 weeks in Cambodia. Amongst all the professional career, engineer seems to hurt the most from brain drain in Malaysia (World Bank, 2011). In brief, the phenomenon of brain drain in Malaysia has slowly but surely morphing into unforeseen consequence that being a developing can bare, with more young graduates intention to migrate, it will be expected that the desirable development that Malaysia envisages will have to put on hold.

1.6 Research Objectives

The general objective for this study is to determine the key salient factors for the occurrence of brain drain in Malaysia. It is constructed in the means of gaining insight from key focus group, in this case, amongst the graduates for their expectation in human capital flight and what could possibly be the reason behind for such outward influence.

1. To explore the phenomenon of brain drain in Malaysia
2. To examine the push-pull factors for brain drain amongst youth in Malaysia
3. To analyse the perception to emigrate abroad amongst youth in Malaysia

1.7 Research Questions

Based on the problem statement as mentioned above, these questions are formulated in hopes of answering the influence of brain drain amongst the youth in Malaysia in line with research objectives as listed above.

1. What is the situation of brain drain in Malaysia?
2. What are the motivating push-pull factors of brain drain in Malaysia?
3. What is the perception to emigrate abroad amongst youth in Malaysia?

1.8 Significance of study

Regardless of how many past studies had done in particular with the knowledge of motivating factors on brain drain but the number of talent exit is yet to decline. According to the statistic of Talent Corp. (2020), it is really the case in Malaysia since 1982, just medical personnels alone, there were 487 recorded at that time and the current data in 2010 was recorded with 2278 in total, which is 5 times the number of increment. Hence, this paper hopes explore the phenomenon of brain drain in Malaysia in order to gain thorough insight whether brain drain should be treated as an alarming case or perhaps should only view it with the attitude of a grain of salt, as those claims can be exaggerated by the scholars due to lack of latest studies on brain drain in Malaysia. Human capital is a valuable resource of all levels of nation development, and brain is expressed as skilled, well-educated, competent, professional and mostly young (due to most productive period). Therefore, the development of technologies and sciences from home country are heavily relied on young, competent and qualified group in which bringing attention to focus group of this study, the graduates.

Youth has been specifically targetted in this study, naturally, as we know tertiary graduates are the backbone of the issue. So, this paper will help to find out the push-pull factors in regards of the perception of emigration within graduates. With many data that have proven the intention to remain in foreign countries in hopes of better future, even for those who intend to return, it is likely for them to exit the country again due to lack of career opportunities, for the most part in professional

fields. However, some studies project Malaysia as one of the highest remittance return countries due to currency differences. This is a great overview onto Malaysia's future, remittances are able to drive a country's economy hence the development state but if approaches by governmental figures are not done pro-actively in retaining its talent, it will be just the matter of time before skilled-workers starts leaving the country again. Hence, the focus of brain drain in Malaysia should not be taken lightly. With that said, this paper will contribute to the analysis of intention to migrate amongst youth in Malaysia.

Those policy implementations in Malaysia such as REP, PEMANDU and NEAC are intended to ease brain drain impact in drawing back talent from foreign countries with promised amount of incentives and benefits. But based on the data provided in study from OECD-UNDESA (2013), the statistic shows emigration rate in Malaysia is not improving with more talent loss over time, hence it has raised the question of whether these attempts by officials are useful and effective. Many studies in the past in regard with brain drain in Malaysia are mostly done in quantitative research method. In depth interviews are rarely seen for this topic, hence, it may pose as the limitation for thorough insight of what could influence brain drain. While based on past literature database, the studies of brain drain are mostly done in the western context, however in Asia region, information are still scarce. Hence, this paper aims to expand existing studies of brain drain in Malaysia using Maslow's Hierarchy of Needs and theory of reasoned action in explaining the phenomenon in hopes of promoting sustainable, equitable and effective measures for diaspora programmes and initiatives.

CHAPTER II : LITERATURE REVIEW

2.1 Brain drain and its where-about

Brain drain is the exit of talent from a country to another amongst skilled workers and it is described as hindrance of a nation's social and economy development. According to Aytac and Aydin (2019), brain drain does not consist only lost talents due to migration, the intention to work or study abroad from fresh graduates are also part of the initiation of brain drain. The academic effort for this phenomenon had started since the 1940s, as "brain drain" at that time was understood as emigration of healthcare professionals from their native land to United Kingdom and United States (Ahmad, 2004). The terminology of brain drain was then introduced as the outflow of professional workers. However, the pivotal point for brain drain happened by the mid 1960s, it had been raised as a concerning issue until World Health Organisation (WHO) published a study among 40 countries on the magnitude of migration of physicians or nurses in 1979, about 90% of the migrants were found in mainly 5 countries which includes Canada, Australia, Federal Republic of Germany, United Kingdom (UK) and United States (US). From the same study, it had estimated the current trend of brain drain would be different as it focuses more on elite workers from less developed countries to economically prosperous countries rather than mass labour mobility of poor and unskilled group during the 19th and early 20th centuries (Mejia, Pizurki, & Royston, 1979).

Brain drain has caught global attention, with its extensive impact that has affected many countries, most notably in less developed countries. According to Kwok and Leland (1982), less developed countries also known as (LDCs) are most affected due to exceptional number of talent lost which leads elongated time span to achieve intended development for a country, while most developing countries are in high demand for highly-skilled workers. Hence, government are to spend more funding on hiring foreign professionals to take up positions like professional and managerial personnel that had been left behind by emigrated talent. It is explained as many young elites from LDCs are prone to foreign attractions in their tempting career offers, with promising amount of payment and career prospect, one is said to never return to their homeland. The current trend of brain drain seems to favour in the western side as many developed countries are situated there, with more talent are moving in from LDCs only constitutes more brain loss (Iravani, 2011). Receiving countries such as Australia, Canada, Germany and France, these four economically stable and technological advanced countries constitute 93% of total migratory flow (Carrington & Detragiache, 1998).

2.2 Focus group and brain drain effects

The targetted group in the study of brain drain seems to have a collective direction that points to the younger group. With many tertiary-educated students graduating each year and go through the process of trials and attempts in landing a job later. Thus, graduates are considered the root of problem and most salient focus group in determining and evaluating the impact of brain drain due to amount of data that is

available as well as reliability of those information. Polimeni and Iorgulescu (2008), supports the same belief because in the capital district region of New York state suffers brain drain with many young graduates responded that salary and employment were the main factors for their idea of leaving the country. It is not surprising to see graduates to emigrate as they are mostly young in age and possess gritty attitude in chasing their goal. The brain drain of graduates should be treated as primary concern in view of the fact that the benefiting factors that they are able to provide, particularly in terms of productivity and potential conferral contribution to economy growth back to their country. Similarly in Pakistan, an alerting percentage of medical graduates migrating to foreign countries, mainly United States for occupation security, financial condition and internal motivating factors in Pakistan. 60% of medical graduates had also expressed their keen in training abroad and 47% of them intend to stay in host country (Imran, Azeem, Haider, Amjad, & Bhatti, 2011).

Fast forward to the mid-90s, globalization occurred with more integration of people around the globe, hence, it has acted as the catalyst in the formation of talent disperse, with brain drain that comes into play of increasing emigration rate which causes a country's starvation of talent replacement and a long list of spiral effects that comes along with it. For example, the emigration of elite professionals causes inequality at an international level, with rich countries which is typically the host countries will only get richer at the expense of poor and developing nations (Qadri, 2017). Qadri also mentioned the economic gain from rich countries in regard with brain drain is unfair to poor countries, not only they have to deal with talent loss in professional field which hinder development and the employment of low-skilled workers were also found largely in the U.S. and Canada. It is no doubt that developing countries are to

struggle economy loss at the cost of High Qualified Personnel (HQP) emigration. In an empirical finding of GDP in Egypt, the plummeting result shows negative impact of brain drain that poses as a threat to a national economy. The situation is explained as such, when a skilled worker leaves a country, it reduces the supply labour and affects productivity, hence hurting GDP in developing countries.

2.3 Push-Pull Factors

According to Boyle and Kitchin (2014), brain drain happens when home country's development trajectory is failing, it has prompted the idea to relocate in hopes of better living for talented, skilled and younger people. The causes of brain drain is in all ranging, but is heavily concern over job related opportunities and the amount of pay to be received. It has been supported by the study of causes, challenges and prospects of brain drain in the context of Eritrea case study. According to Tessema (2010), the diminishing economic condition, corrupted political system and social instability are the key factors in viewing the cause of brain drain. With 64% of total 674 nationals were recorded not returning to Eritrea, as a result, the government were deprived of professional talents in the midst of sustainable development. As these three factors are the decisive components when it comes to discussion of brain drain or brain gain for a country.

The term of brain circulation is beneficial to the development of LDCs, it is the cycle of migrating abroad, acquiring a work position and later return home country with skill set and knowledge as a form of contribution. Yet, brain drain will only proceed to happen if those motivating factors are not resolved with better solutions. Within the

doctrine of brain drain, there are multiples motivating factors that are applied on local talent causing one to leave the country for better living standard and job security. While this phenomenon is called the push and pull factors of brain drain. According to Oxford reference, push-pull factors are commonly used to describe the study of migration, while push factor is the motivation to leave the country and pull factor is the attraction from foreign place that draws population. In this case, pull factor is primarily discussed in the basis of economic requirements that a country has to offer rather than any historical value or family connection (Bach, 2003). Besides, wage differential in professional fields is another pull factor that is globally acknowledged. According to Carrington and Detragiache (1999), the wage disparity between poor and rich countries for the same job has a big gap, without financial stability, one is expected to seek out for better quality of life and education opportunity for next generation in another place. The stability in a country in terms of social or political environment plays a crucial push factor in brain drain. For example, according to World Bank DRG (2019), the estimated number for international migrants and refugees in 2018 were 266 million due to their social condition back home.

The push and pull factors that contribute to brain drain vary from one country to another. In the report of six African countries compiled by Awases, Gbary, Nyoni and Chatora (2004), 50% of those interviewed expressed their desire to leave the country due to poor healthcare and poor management of health facilities, the worry of HIV/AIDS during that time. Hence, this has been categorised as another push factor in brain drain. Many push factors that were previously discussed in the study such as limited intellectual property rights, short of career opportunity, work quality, availability of medical or technology equipment, lifestyle choice and education

opportunity (Kuhn & McAusland, 2009; Beine, Docquier, & Rapoport, 2001; Fargues, 2011). The solution to this push and pull factors was discussed in addressing the policy challenge of global brain drain by Roudgar and Richards (2015). They suggested the aid should begin from providing better education in home country and implementation of incentives and remittance which helps to encourage expatriates to return home.

2.4 Brain drain in Malaysia

Malaysia is one of the developing nations, situated in south east Asia with Thailand, Singapore and Indonesia as its neighbouring countries. According to Awalluddin (2019), human capital management in Malaysia is heavily influenced by a number of components while one of the prominent ones is brain drain that causes chain effect to country's economy. The phenomenon of brain drain, which is talent mobility, mainly generation-Y who are born in 1980s and 1990s does not cease to exist until 50% of elite workers from Malaysia have emigrated out of the country. Since 2000, the number of highly-skilled workers in Malaysia had dropped 9% each year. Just to put into perspective, in the current level of workforce in Malaysia, four-fifth of them are SPM-level education, only small fraction of them are qualified personnel (NEAC, 2010). With increasing rate of talent loss, it has drawn further away from the goal in achieving high-income economy in Malaysia.

The economy status in Malaysia is considered under middle income trap. According to Annamalah, Munusamy, and Sentosa (2016), Malaysia struggles to overcome this hurdle for 25 to 30 years due to delaying factors, one of them is namely lack of innovation and skills. In this case, the exit of professional talent prevents country's

shift to high-income status. Statistically speaking, it is indeed the case for middle-income countries to experience highest emigration rate. In the report of World Bank (2011), talent mobility predominantly happens in middle-income countries because of motivated incentives as well as the sheer intention to leave. The low-income countries are not affected much by brain drain because of money constraint, which makes the idea of emigration not likeable for them while the remaining high-income countries are the lowest in this regard.

In Migration and Remittances Fact Book (2011), Malaysia is one of the top 10 emigration countries in South East Asia and top 10 migration corridors which is the one-way flow emigration of Malaysian to Singapore, with 1.1 million was recorded in 2010. From the same report, Malaysia was listed in top emigration of physicians in 2000 with 2200 (11.9% of total physicians) were recorded in Malaysia which is slightly higher than United States that stands only at 1900. The demographic of qualified emigrants in Malaysia is said to be one-sided in the minority race. According to Choong, Keh, Tan, Lim and Tho (2013), there is a saturated number of young emigrants from Malaysia in Singapore, the result discovered Chinese and Indian have a higher rate of brain drain which was resulted from unequal ethnic treatment. Despite talent depletion which is the out-turn of brain drain phenomenon in Malaysia, it is interestingly enough to know Malaysia is also a destination of highly-skilled immigrations, mainly from China and India (Dunnewijk, 2008). HQPs from Malaysia are highly sought after globally, with more young talents graduate each year, brain drain has been described as a vicious cycle in Malaysia. According to Talent Corp (2020), this cycle weakens country's economy from first, when talent leakages which bring an impact on insufficient talent as the second quadrant of the

cycle and leads to growth and investment constraints as third and lastly, result in fewer jobs available in the market. As an approach from Malaysia in tackling brain drain issue, the governmental unit works in tandem with TalentCorp in adopting a virtuous cycle, to refer Malaysia as the talent hub in hopes of enhancing growth and retaining talent availability in order to reach the end goal of high-income job opportunities for the locals. Structural reforms that are applied in Malaysia are government transformation programme, Education Review (MoE), Labour Law Reform (MoHR) and New Economic Model (NEAC) (TalentCorp, 2020).

2.5 Past studies on brain drain in Malaysia

The previous academic findings on brain drain in Malaysia are relatively new but a number of studies have been conducted mainly in regards of discovering the impact of brain drain. For example, Harnoss (2011) discovered brain drain influence on GDP in Malaysia which was recorded under the economy facet influenced by brain drain. Besides, studies on career specific in related to brain drain in Malaysia have also been mentioned in previous papers. For example, the effort in alleviating talent lost in the engineering field was discussed (Rahman, 2012). Similarly, a research on Malaysia engineers' intention to migrate abroad was carried to call attention to emerging concern of brain drain (Ramoo, 2018). The brain drain effect does not extent only to engineering field as other professions that require highly-skilled workers have been impacted as well. According to Jauhar, Yusoff, and Khoo (2009), the shortage of accountants in Malaysia is explained by the brain drain impression, mainly motivated by job opportunities and career benefit such as higher pay. Moreover, Chandar, Jauhar, and Ghani (2015) explored the possible factors that influence Malaysian

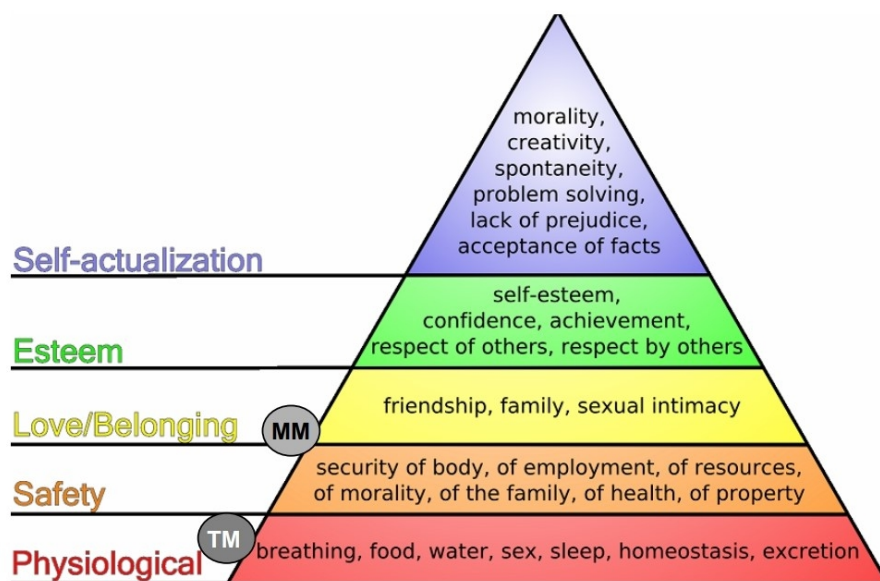
postgraduates' intention to emigrate, which consists of homogeneous direction and similar focus for this current paper. This study has provided substantial information to the table in regards with the brain drain phenomenon in Malaysia, based on the result, the reasons are namely poor career opportunity, poor quality of life and income differential. Choong et al. (2013) added that among all the possible antecedents, less attractive compensation and career prospect scarcity pose the highest form of influence in Malaysia. Yeow et al. (2013), supported the same findings result, and added that personal behaviour such as preference or liking is unrelated to the intention to leave. Hence, the study has highlighted brain drain in Malaysia is solely influenced by those discussed motivating factors rather than any selfish decision. Likewise, job engagement which is the love and passion for work is also unresponsive to brain drain in Malaysia (Jauhar, Lim, & Haron, 2014). Another interesting result about unstable political condition presented as the first reason for talent to emigrate due to discrimination and unfair treatment (Fong and Hassan, 2017). Other researching effort in regards with brain drain in Malaysia, such as the testing of framing theory in comparison of brain drain reporting styles between two news outlet (Lim, 2014). The finding of proximity and English language usage are associated with higher emigration rates in which belongs to the formation of brain drain (Foo, 2011).

2.6 Theoretical Framework

2.6.1 Maslow's Hierarchy of Needs

Maslow's hierarchy of needs is a human motivation theory proposed by Abraham Maslow in 1943, and later improved this idea with the inclusion of human innate curiosity which created a pyramid classification of needs that describes the motivated behaviour under five different level of needs, namely physiological, safety, love, esteem and self actualization (Maslow, 1943). The lowest fraction in the pyramid is physiological needs, which is the strongest driver that motivates the demand for basic needs such as food, shelter, water and protection. Without fulfilling the entry level of basic needs or at least be partially satisfied, it is unlikely for people to be motivated to another stage of needs, hence, this theorem has been widely used in the discussion of migration issue (Dohlman, DiMeglio, Haji, & Laudanski, 2019). For example, in the study of brain drain in developed countries, this theory was applied to categorise the motivating factors of emigration, in the end, the result showed the dissatisfaction with the society belonged to the level of self-actualization need (Benefader and Boer, 2006).

DIAGRAM 3 : Maslow's Hierarchy of Needs



Source: Benefader, V., & Boer, K. D. (2006). To move or not to move, that is the question! *International Business Programme*.

This theory implication in the context of Malaysia can be seen when determinants of brain drain were justified using this theory to find out effectiveness of New Economic Model (Ang, 2012). Most of the application of theory is mainly used to describe common triggering elements in the subject of brain drain such as monetary pursuit or better career opportunity. For example, when Ghani and Jauhar (2015) used Maslow's need theory to identify talent mobility to Singapore, strangely but awarding enough, political instability was found to be the primary concerning need via exertion of this theory (Fong and Hassan, 2017). Similarly, this theory was adopted in the study of brain drain of accountants in Malaysia, showing the primary need pursued was higher income (Jauhar & Yusoff, 2011) in which align with the same outcome as the study of postgraduates brain drain, stating unattractive remuneration packages from home country motivates them to leave (Chandar; Jauhar & Ghani, 2015). According to Yee and Yuen (2014), the requirement of particular level of need varies between individuals, by using this theory, the study found that in food sector, work flexibility was not any motivating factor of brain drain in Malaysia. Through this theory, this will aid policy maker to identify desired needs and eliminate unwanted needs based on past research findings to best formulate a practical and effective resolution to the case of brain drain.

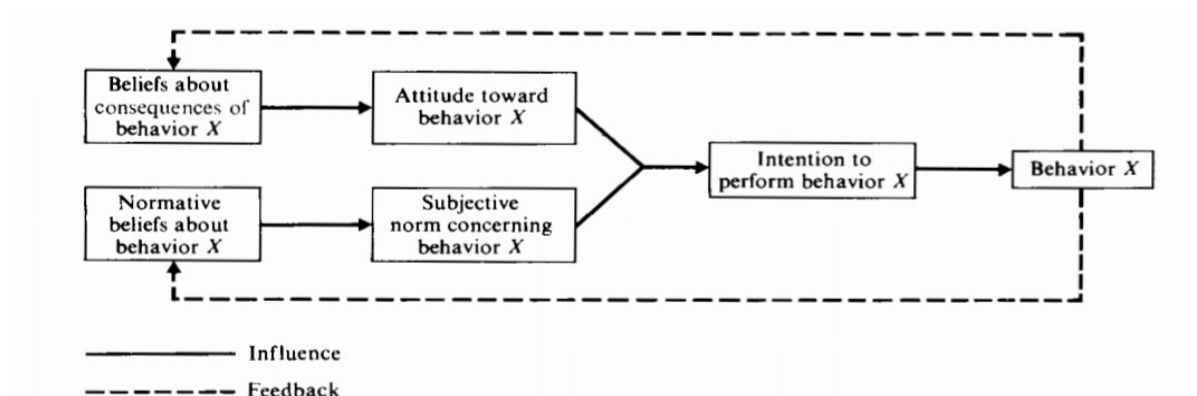
How can it be applied?

This theory is applied in the study through a series of overview from its preliminary stage which is physiological needs (basic and survival) such as shelter, water and food, once this stage if fulfilled, the need no longer motivates the individual. Hence, it is

important to note that the hierarchy of needs have to view in a sequential order, if one is not satisfied, it cannot be move to the second or or following stage. Secondly, it is safety and security. Judging from the situation of brain drain, safety here belongs to stability in social and political environment in a country. Thirdly, the social needs such friendship and family, in this case, family ties could be motivating factor in brain drain. Onto the following stage, fourthly, it is esteem need where respect from others and self respect are emphasized. Lastly, the pinnacle stage in the pyramid is self-actualization which is also known as self-transcendence. It is meant by the realization to be fulfilled for one's potentialities as well as the drive to be better. This stage can be explained in brain drain phenomenon as highly-workers who are generally competent and uncomplacent to their current work environment and wish to undertake higher stake and rewarding experience by working at foreign countries.

2.6.2 Theory of reasoned action

Theory of reasoned action (TRA) which is an extension of planned behaviour that was developed by Fishbein and Ajzen (1975) in hopes of explaining the behaviour of human action motivated by any exchange of values. In short, this theory describes how intention affects behaviour, while behaviour here is the initiated action once intention is set which is the positive attitude when one realises the beneficial side of the exchange.



Source: Fishbein, M.A., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. *US: Addison-Wesley*. Retrieved from <https://people.umass.edu/ajzen/f&a1975.html>

For example, an individual decision to migrate is due to interchange benefits between the host countries (eg :receiving human capital) and emigrant (eg: receiving higher pay or career opportunities) under the context of brain drain. Girma (2018) used reasoned action theory to examine the emigration attitudes of social work, the result showed the intention to migrate was positive due to education qualities and financial pursuit came at second. Examples of implication of theory in Malaysia, Ramoo (2018), applied theory of reasoned action as part of behavioural psychology approach in quantifying brain drain, specifically on analysis of engineer’s intention to migrate. Other than that, Chandar et al. (2015) utilised this theory to understand postgraduate intention to work abroad and what could foster those attitude. Similarly, in the study of determinants of brain drain in Malaysia, this theory was applied to justify the behaviour to emigrate (Ang, 2012; Fong & Hassan, 2017).

How can it be applied?

This theory can be implemented within the study scope of migration while in this case, brain drain. As this theory is able to accentuate the underlining potential pull factors

that policy makers need to take notice. In another word, positive attitude is considered the first step, when one realises the benefits exchange in working and living abroad. Hence, stimulating the intention to leave for what is considered the second phase. And the last step happens when actual behaviour (action) is taken which is emigration. Subsequently, brain drain is explained.

CHAPTER III: RESEARCH METHODOLOGY

This chapter is referred to understand the method to be carried out for this study of phenomenon of brain drain amongst youth in Malaysia. This paper will be conducted using qualitative research method for in-depth data analysis and collection to set as a guide for future researchers and policy makers to efficiently and effectively rectify the predicament of brain drain impact.

3.1 Data Collection : Qualitative research method

Qualitative research method is fundamentally a way to examine the way people make sense in their thought process and perception to issue out of real-life experiences. The given answer which is the information that are generally expressed using everyday concepts (Cropley, 2019). On the other hand, quantitative research is simple statistics that benefits studies that involve mass population, hence, qualitative contrast with quantitative as one emphasizes personal view as the other are merely presumption made by researchers such as survey tests (Bacon-Shone, 2015). Many researchers have adopted this research method for gaining information about how human beings function (Cropley, 2019). Therefore, qualitative research method such as personalised interview will be used to gain in-depth insight about phenomenon of brain drain in this paper.

3.2 Respondents and Sampling Method

Since brain drain primarily happens amongst the Highly Qualified Personnels (HQP) as mentioned above. Therefore, the main focus in this paper is on graduates which also can be categorised as youth, as they are the prime target in global talent loss. There are certain inclusion criteria that need to be fulfilled in order to be selected as potential respondent for this study : (1)participants must be Malaysian, (2)adults aged 21 and above, (3)tertiary educated at least, (4)local education acquired. Neutral variables that will not be accounted in this paper are gender, race and sexuality. The total number of respondents to be interviewed are 10, with each in different professional field to avoid homogeneous result. IT professional, medical professional and engineer are considered the highest brain lost in Malaysia (World Bank, 2011). With that said, this paper is expected to include at least these three particular fields in sampling respondents of this study. The sampling method in this paper is purposive sampling. This sampling method is commonly used in qualitative studies, as purposive sampling values validity and efficiency as the priority mission, it is also known as selective or subjective sampling as researchers follow certain criteria of respondents that are meant to be met in order to receive desirable result from study (Etikan, 2016). Under purposive sampling, snowball sampling will be adopted. According to Humphries et al. (2013), snowball sampling is likely to recruit potential subjects from the existing ones which provides a process of chain referral.

3.3 Research Instruments and Analysis

In this study, initially an in depth interview was intended to carry this research, it has however been rejected due to the global pandemic that happened during the designated time frame, from 30th of October 2020 to 1st of December 2020. Hence, a qualitative research was done through phone calls, Email and WhatsApp message using curated questions in regards to brain drain phenomenon that are formulated from the research objectives in this paper. There will be 7 unstructured questions that brings a linkage to align the objectives in this study, for example (1) What is the phenomenon of brain drain in Malaysia? (2) What is your perception to emigrate abroad? (3) What are the motivating factors that prompted such intention? These are the examples of open-ended questions that are designed specifically for respondents to express their perception, intention and justification of behaviour meticulously without any sort of limitation in order to obtain existing result or even more. On a consensus side, this interview will only be conducted when permission from respondents are given to ensure the entire research process until the end result are done legally. For research analysis, this study will practise thematic analysis method which is commonly used for qualitative papers when set of texts from respondents are later transcribed to analyse the result based on interpretation of potential meaning that is in any sort of way that relates to the objectives of this paper. The result will later be grouped into themes in order to testify the result patten which allow us to further understand the underlying variables that affect the result.

CHAPTER IV: FINDINGS AND ANALYSIS

This chapter is discussed vis-a-vis findings of the focus group in which consists of 10 tertiary-acquired graduates through empirical method. Further, the result and the underlying purpose of questionnaires for the interview will be explained by aligning to the objectives from this study that has been mentioned in chapter 1.7. From there, a thorough result evaluation will be done via concise data analysing to highlight certain pivotal contributing factors for the existential talent loss such as their perception of the introductory term ‘brain drain’, their ultimate decision whether to leave our homeland or not and subsequently to their push and pull justification through myriad of reasoning and suggestions to the issue in the following discussion.

Analysis of research material

Below provides a set of open-ended questionnaire that contains 7 questions in total to chiefly examine the significance of the phenomenon of brain drain from 10 selected candidates and not to mention, to find out the key factors in influencing their decision of leaving. Hence, in order to break it down accordingly, the questions have been grouped into categories to pinpoint motivations from these questions when are asked and also to steer a synonymous direction of this study towards the core purpose for this paper, which is acknowledging this issue in Malaysia.

- **Question 1** focuses on understanding of brain drain phenomenon in Malaysia through their perspective lenses. **Category A*

- **Question 2-5** aims to find out the likeliness of emigrating abroad and further provides their reasoning to such decision **Category B*
- **Question 6-7** indirectly provides answers to the brain drain problem and suggestions to resolve such issue in Malaysia. **Category C*

4.1 Overview of questionnaire :

1. What is your understanding of the phenomenon of brain drain in Malaysia?
2. How likely are you to leave the country if the opportunity is given to you?

Note :

(IF YES: ANSWER Q3, Q4, Q6 AND Q7)

(IF NO: ANSWER Q5 ONLY)

3. If yes, state your push factors (from Malaysia) for such a decision. (Eg: lack of job opportunity)
4. If yes, state your pull factors (from foreign countries) to such decision. (Eg: better social status)
5. If no, state your reason.
6. Where will be the desirable place for you to move to? Why?
7. What is the ideal solution for retaining young talent like you to remain in the country?

4.2 Overview of selected candidates (10):

<i>*Number of individual</i>	<i>*Age</i>	<i>*Race</i>	<i>*Profession</i>
Individual A	25	Chinese	Electronic Engineer
Individual B	28	Chinese	Pharmacist
Individual C	23	Chinese	Graphic Designer
Individual D	24	Chinese	Translator
Individual E	27	Indian	Counsellor
Individual F	29	Indian	Accountant
Individual G	25	Indian	E-commerce Executive
Individual H	27	Sikh	Litigator
Individual I	24	Malay	Marketer
Individual J	26	Malay	Photographer

This goes without saying, the criteria from amassing the respondents for this study includes, (1) participants must be Malaysian, (2) adults aged 21 and above, (3) tertiary educated at least, (4) local education acquired as mentioned in Chapter 3.

4.3 Result Findings

For the sake of clarity and accuracy in analysing the result, 3 categories have been devised into **Category A*, **Category B* and **Category C* that are derived from 7 questions listed above.

**Category A* entails:

1. What is your understanding of the phenomenon of talent exit in Malaysia?

<i>*Answer (Summary)</i>	<i>*Individual</i>	<i>*Explanation</i>
<ul style="list-style-type: none"> ● Depleting number in workforce 	<ul style="list-style-type: none"> ● B ● D, F ● E, G ● A, H 	<ul style="list-style-type: none"> ● Have read about similar publication regarding talent loss in Malaysia ● Judging from the term, it is self-explanatory to understand the leaving of talent workers in Malaysia to another place for better living and has since caused the country to face workforce imbalances ● They leave Malaysia due to unsatisfactory pay, mainly due to currency discrepancy. ● People whom they leave the country as supposed to that being

		<p>the only way out, since the economy climate in Malaysia is fairly low and slow, and rather to risk for better future than to stay, because cashing a borderline pay check seems undesirable, when we have neighbouring countries that are doing better than Malaysia.</p>
<ul style="list-style-type: none"> ● No knowledge to the phenomenon/ unbeknownst to such terminology 	<ul style="list-style-type: none"> ● I, J ● C 	<ul style="list-style-type: none"> ● First time came across this term, and has no clue to what actually meaning of it. ● Assumption of medical condition that is related to human brain

Exact Quotation:

Individual A:

“It is obvious that the economy in Malaysia is nothing as compared to Singapore, while Singapore is just few hours drive from Malaysia, not to mention the convenience of flight right now makes it more viable to work there.”

Individual B:

“ I came across a similar publication regarding to talent loss with the term brain drain in Readers’ Digest, so I came to know of it and the impact seems to be true as most of my friends in my field often talk about outside opportunity.”

Individual C:

“If I have to guess, I think it has something to do with brain condition that I have no knowledge of.”

Individual D:

“From the term brain drain, I think is about worker leaving the country and has caused social issue.”

Individual E:

“People who choose to leave Malaysia, mainly due to their complaint of low salary because of the currency conversion.”

Individual F:

“It is just a fancy way of saying anyone who leaves the country for better living option out there.”

Individual G:

“I saw a news on The Star that talked about this term, and its pretty much about higher pay that are offered in other countries that cause such attraction to leave the country.”

Individual H:

“The unforeseen future in Malaysia, a lot of reasons but more specifically slow economy pushes workers to look for better job in other place, such as Australia, Singapore and even in India, for medical field that offer better pay and equipments.”

Individual I:

“This is actually my first time hearing this term and I don’t want to guess because I know the answer is going to be very far off.”

Individual J:

“No idea what is that, it has to be something serious but perhaps in a simpler word I could understand.”

Summary:

The phenomenon of brain drain in Malaysia seems to be acknowledged by most in the study and amongst the 10 respondents, 7 of them are able to identify the meaning and general cause of problem with their given perspectives. However only the remaining 3 are unable to decipher the terminology of brain drain and have no knowledge of the case that is already happening in Malaysia.

****Category B*** entails:

1. How likely are you to leave the country if the opportunity is given to you?

2. If yes, state your push factors (from Malaysia) for such a decision. (Eg: lack of job opportunity)
3. If yes, state your pull factors (from foreign countries) to such decision. (Eg: better social status)
4. If no, state your reason.

<i>*Answer</i>	<i>*Individual</i>	<i>*Reasons</i>	<i>*Explanation</i>
● Yes	● A	<ul style="list-style-type: none"> ● Unsatisfactory payment ● Obsolete way of working ● Limited job opportunities ● Slow economy in home country 	<ul style="list-style-type: none"> ● Fairly low pay for fresh graduates despite graduating with engineering degree ● Rigid work environment in terms of traditional work etiquette ● Positions that are offered in this specific field is very limited ● Have no confidence in country's economy judging from where it is leading now
	● B	<ul style="list-style-type: none"> ● Currency disparity 	<ul style="list-style-type: none"> ● Unwilling to compromise the difference of currency exchange between

		<ul style="list-style-type: none"> ● Dissatisfaction with living standards ● Social situation 	<p>Malaysia and host countries</p> <ul style="list-style-type: none"> ● Due to difference in currency, purchases are taxed higher as well as any material purchases ● Political unrest causes distrust in any prospective future in the country
	<ul style="list-style-type: none"> ● C 	<ul style="list-style-type: none"> ● Social status ● Limited job opportunity ● Work often been under-appreciated 	<ul style="list-style-type: none"> ● Being a minority pose disadvantages in many situations ● Designing is still considered a niche market ● The amount of compensation for work is too less
	<ul style="list-style-type: none"> ● D 	<ul style="list-style-type: none"> ● Currency disparity ● Lack of freedom and recreation at work 	<ul style="list-style-type: none"> ● The thought of “having to do the same work, but getting paid differently” ● Free space and relaxation are not available at workplace

	<ul style="list-style-type: none"> ● E 	<ul style="list-style-type: none"> ● Economical situation ● New experience/lifestyle ● Racial discrimination ● Unsuitability application of learned knowledge ● Better job security and stability 	<ul style="list-style-type: none"> ● Negative view on Malaysia's economy ● Being able to start new and embark new journey ● Biasness in recruiting employees ● Counselling is still considered a small market ● Counselling centres in Malaysia are still fairly small in size
	<ul style="list-style-type: none"> ● F 	<ul style="list-style-type: none"> ● Unequal opportunities ● Experience different way of life 	<ul style="list-style-type: none"> ● Dominant race possesses privileged status quo ● Get to see the world in another lens through culture and experiences
	<ul style="list-style-type: none"> ● H 	<ul style="list-style-type: none"> ● Social condition 	<ul style="list-style-type: none"> ● The unity among Malaysians has yet to achieved, and it is only at the state of compromising

		<ul style="list-style-type: none"> ● Political instability ● Racism 	<p>between races at best.</p> <ul style="list-style-type: none"> ● The fight of power between politicians risk main agenda for nation building ● Discrimination occurs intermittently in countless of situation
● No	● G	<ul style="list-style-type: none"> ● Closer to home ● Growing economy 	<ul style="list-style-type: none"> ● Unwilling to leave everything behind, especially loved ones like family members ● Thriving E-commerce climate in Malaysia
	● I	<ul style="list-style-type: none"> ● Being closer to family members ● Easier to land a job 	<ul style="list-style-type: none"> ● Able to attend any family emergencies without the worry of being too far from home ● Having to spend all your life in Malaysia, one has accustomed to the culture and way of living that

		<ul style="list-style-type: none"> ● Love for the country 	<p>everyone shares</p> <ul style="list-style-type: none"> ● The spirit of patriotism
	<ul style="list-style-type: none"> ● J 	<ul style="list-style-type: none"> ● Rich in culture and amazing food ● The comfort of staying in homeland ● A sense of reality check 	<ul style="list-style-type: none"> ● The multicultural aspect is an attraction and the reason to stay ● The sentiments of being in home country provides solace ● The responsibility of taking care of the elders

Exact Quotations:

Individual A:

“I will most definitely, the major reason would be the uneven pay in different working industries, for engineering fresh graduates the pay is fairly low as compared to what we have spent during the course of our studies. Aside from that, the traditional working environment where bureaucracy and office hierarchy still exist till this day which makes job less fun and rigid. The pull factors from other countries would be the varieties of job that offers are almost off the chart especially in mega tech companies like Apple and Google, they have so much to offer unlike start ups in Malaysia, only

leeching the remaining information. Another significant pull factor would be the unfavourable economy in Malaysia makes it even harder to convince me to stay if I have the chance to leave.”

Individual B:

“I will choose to leave Malaysia because of the currency difference. My friend who is now working in the same field as I do, as a pharmacist in Florida, she gets almost 10k USD per month, and forget about the conversion, value to value in comparison, we are already so far off from them. Another reason to leave would be poor living standard in Malaysia, and again due to the difference in money, a lot of material purchases and travelling seem so effortless in high currency rate countries. The political environment these days are also in great confusion, just when you think the country is going through change, but soon enough that is another a shift of power.”

Individual C:

“Yes, very likely as you know being a Chinese in Malaysia, is either we work extra hard in a private sector or you choose to leave the country in hopes of your destination will provide you an equal ground and fair opportunities. Meanwhile, I am a graphic designer which is considered a small market hence only adding extra weight to the problem. And only major cities like Kuala Lumpur and Penang still give hope in this field, the rest of the states, if you wish to aim for higher pay is kind of hard to achieve. Unlike in first world countries, people are actually willing to spend, or even some residential houses come with design which create job opportunities for us, however here in Malaysia, designing is just a luxury. Designing is an act and its hard to put a price on it and have a perfect explanation why does it cost that way and, most often

than not, the cost of our work is underpaid while many customers love to haggle their way in for a better price.”

Individual D:

“Yes, I will leave the country for sure. Imagine yourself working the same thing but the only difference is at two locations but the outcome which is the pay is either double or triple than working locally. I believe that is a very convincing point to leave. Another push factor to me would be old school way of work time from 9a.m. to 5.p.m., everyone sits in their cubicle and the office is pin drop silence. And that happened to me when I first got my translation job in Johor. And most notably, the slow economy that we are having regardless of the pandemic, when you compare to Singapore, Malaysia is always one step behind or maybe more. I believe the pulling factor from other countries that I desire to go would be experiencing new way of living instead of being co-dependent in our comfort zone, is better to leave at my age, at least to have a story to tell when I am older.”

Individual E:

“Very likely, when you come to think of it, it is such a good deal when opportunity is given to you to leave. While the push factor is non other than the racial discrimination that I face being an Indian, that is a lot of racial based job recruitment, even sometimes you can notice any room for rent with a big notice of ‘no black people allowed’. Besides the race issue, it will be unavailability of counselling work in Malaysia, as mental health is not considered an issue in our society. While many are still cashing the minimum pay check, so it is no surprise that booking a session that costs RM100 will be seen as too much, unlike in U.S, they value mental health dearly,

they even have a day to commemorate it. But I can say it is just the matter of time before this field starts coming up but for now, even the employee benefits that I get from my company is still considered inadequate because of how small it is and I actually have the thought of opening my own.”

Individual F:

“Yes I will, judging from clear observation when you are born as a minority in Malaysia, it is hard to not question why do they get it but not us. But it is also that hard pill you have to swallow if you want to continue to stay here. It is no question that the dominant race has it all, meanwhile we just have to work extra hard to get there. Despite the unchangeable, the interesting reason why I choose leave is actually in search of exposure in different culture, they say travelling is the best investment, if I get to work at other countries, aside from more money making in the process, it is also the connectivity I get along the way.”

Individual G:

“I don’t think so, first of all, I am very comfortable and content with my work now. The distance from workplace to home it’s just 30 minutes drive. While all my family members and closed friends are here, I don’t see myself leaving the country and have not even thought about it. I think we need to realise the growing economy in Malaysia as well, as someone works in E-commerce, the stats and figures don’t lie when the willingness to spend from Malaysians are seem to be on increasing trend, slowly but surely. I do have strong faith one day Malaysia is just like any other first world country out there.”

Individual H:

“Most likely, I will. From my line of work I deal with many races and I can distinctly tell you that our country is only at compromising state where unity among races is still not there yet. So, I would rather choose to live at places where I am totally accepted or live at somewhere with the lowest population, just to enjoy the benefits being a citizen and avoid any sort of racial altercation at all cost like in New Zealand or Sweden. The politics in Malaysia as of late is also very worrying, the leaders of our country constantly compete for power between political parties, even during the pandemic which has also caused the second wave of Covid-19 broke out in Sabah due to the election at the wrong time. So, this is not too promising for me to stay, and it is nothing new for me as an Indian, we face racism as much as the African American in U.S, the preconceive notion of us being gang related or any suspect for drug-type activity, the fear of driving through road block unfortunately is also there.”

Individual I:

“No, all my family members are here in Malaysia. If there is any family emergencies, I will always be there to help solving issue without going through the struggle of flying back home from other countries. Besides, the idea to leave the country in brain drain is about looking for jobs, I don't find myself having any problem in getting a job when I have lived all my life in Malaysia, in learning local social cues and understand the lifestyle here. Most importantly, it is the love for my country and also be a proud Malaysian and call this land our home.”

Individual J:

“No, I won’t leave Malaysia. This country is so lovely from different types of food to multiple cultures densely packed all in a nation and that’s what we are known for. And rather these are the reasons we, as a Malaysian should choose to stay. The idea of being home already feels comforting to me, it is essentially a sense of identity to me. It is indeed true when we were young we tend have thoughts of leaving this place as the saying goes, “the grass is greener at the other side”, but sometimes it is not the case. As reality gets in closer, we are getting older so are our parents, me as the eldest in the family have the responsibility to take care of them, while me leaving this country to chase for my unforeseen dream seems very illogical to me.”

Summary:

The result shows 7 respondents have the intention to leave Malaysia due to a number a reasons, in order to encapsulate them in a simpler manner. Here are the 7 main reasoning from them:

1. Monetary-related reasoning

The financial status from earning seems to be at paramount concern, with many are dissatisfied with the global currency exchange between countries, the discrepancy is so great until one is willing to leave the country in search for better living. Apart from that, the complaint over underpayment for certain professions due to the size of market in Malaysia, hence causes an ungratifying sense of compensation.

Individual: A, B, C, D

2. Job availability reasoning

There are limited job opportunities for certain specific field of study. The gap has yet to be filled, while many will only opt for other possibilities from places outside of the country to look for a desirable career in pursuing their interest.

Individual: A, C, E

3. Scepticism over future reasoning

The distrust of country's economy to grow has caused Malaysian to leave the country due to unfavourable sense of future. Their lack of sureness over country's development state pushes them away from the notion to stay.

Individual: A, B, D

4. Way of work reasoning

A healthy workplace environment is crucial at this time and age, it is said that the traditional work climate is discouraged. The new paradigm of company culture is able to foster good and conducive learning by disregarding unnecessary level of management and power trip from superiors.

Individual: A, D

5. Racial-related reasoning

Malaysia is known as a melting pot where many races call this place as home. However, discrimination and racism do not cease to exist, hence causing talent to leave the country to somewhere that they can find an equal opportunity without having the worry of prerogative from dominant race.

Individual: C, E, F, H

6. *Political instability reasoning*

The political atmosphere in Malaysia is at precarious state when many are worried of the country's leaders compete over power and influence in which causes the agenda of nation building to be at stake. Thus, graduates would choose to leave than to remain for what could be spiralling down.

Individual: B, H

7. *External factors*

The outward influence such as intention to leave for new life experiences and culture learning from other places are also considered a pulling agent for graduates to leave Malaysia. Through their explanation, being single and free at their age, there is no better time for them to venture out, hence such thought process has turned into an impetus to the idea of leaving, which is brain drain.

Individual: D, F

Category C entails:

1. Where will be the desirable place for you to move to? Why?
2. What is the ideal solution for retaining young talent like you to remain in the country?

According to Q2, respondents are asked should they choose to leave the country when opportunity is given in a hypothetical context. Only for those who answer 'YES', who

are namely individual A, B, C, D, E, F and H. They are bound to answer the above questions to find out their ideal places to emigrate as well as providing a suitable solution to such problem through their proposition. Meanwhile, those who answer ‘NO’, they would not included in the following analysis.

<i>*Destination considered (reason)</i>	<i>*Individual</i>	<i>*Solutions</i>
Singapore <ul style="list-style-type: none"> ● More tech companies ● Close to home ● Share similar culture ● Work-life balance 	A	<ul style="list-style-type: none"> ● Government should revise minimum salary for skilled graduates ● Meritocracy should be applied instead of measuring purely from the amount of time, one works at the company
United States <ul style="list-style-type: none"> ● English speaking country ● Previous study experienced ● Closed friends and relatives 	B	<ul style="list-style-type: none"> ● Political situation should be improved ● Equal opportunity for all
Singapore <ul style="list-style-type: none"> ● Close to home ● Speak the same language ● Low living cost 	C	<ul style="list-style-type: none"> ● Eradicate vernacular schools in order to achieve unity ● Provide funding to encourage more start-ups for more job opportunities
Japan	D	<ul style="list-style-type: none"> ● Government should impose

<ul style="list-style-type: none"> ● Cleanliness and safety ● Modern society ● Job opportunity 		<ul style="list-style-type: none"> ● a salary threshold for graduates ● Attract more foreign investors
<p>Singapore</p> <ul style="list-style-type: none"> ● Close to home ● Work-life balance ● More like-minded people 	E	<ul style="list-style-type: none"> ● Work environment should be improved ● Enforce policy for talent return
<p>Sweden</p> <ul style="list-style-type: none"> ● Healthcare ● Carefree lifestyle ● Better work environment 	F	<ul style="list-style-type: none"> ● Resolve racial problem ● Equal opportunity for all
<p>New Zealand</p> <ul style="list-style-type: none"> ● Beautiful landscape ● Less population ● Less influence from politics 	H	<ul style="list-style-type: none"> ● Foster love for the country ● Limit the amount of emigration

Exact Quotation:

Individual A:

“I think will Singapore, one for being so close to Malaysia and we almost share the way of living as well. Not just that, there a lot of transnational tech companies in Singapore that permits work transference, so in another word when you work there, you get a chance to work at their headquarters in other countries because of the how big in scale and size of the companies, they allows you to make such transition. While

for the solution to brain drain, like I mentioned earlier, skilled graduates are not getting paid the way they should, so I believe the government should step in to regulate the minimum amount for them. Another internal way would be, when companies are open for hiring, they should look into how skilled and how good you are at work instead of how many years you have been in the field which is kind of unfair for fresh graduates, and this happens quite often.”

Individual B:

“United states most likely, my best friend lives there we were studying the same course there as well when I was studying for my A levels and my aunt from my dad’s side has a family there too, so it is no stranger to me about that place. And being a ‘banana’, I think I would prefer to live in a country that only speaks English. I think the solution is quite clear, people leaving the country as far as I know is because of the politics in Malaysia and not to mention the racial thing as well, I think when Malaysia is able to achieve equal opportunity for all, that’s when the time this issue will be resolved.”

Individual C:

“Singapore for sure, it has always been my first choice. It’s funny how people complain about the rental there, but the living cost is rather low compared to Kuala Lumpur. Try not to convert it, just compare based on the value, the chicken rice there is only at 3 SGD, and I don’t see Malaysia having any RM3 chicken rice. And of course Singapore is so close to Malaysia and pretty much speak the same way. For Malaysia to solve brain drain, first the vernacular school system should be removed in order to achieve unity just like Indonesia, everyone speaks the same language instead

of the outward mentality that most of the minority have because of unfair treatment, so we tend to look outside when we have the chance but when unity is achieved, I believe most people will stay because there is a sense of love for your country. Another thing that can be done is when government allocate more funding on start-ups and from there, a lot of job opportunities will be created.”

Individual D:

“My choice will be Japan, besides from how clean and safe the country is, I really enjoy the modern culture there where they appreciate clothing and appearance more than anywhere else. And, I am a Japanese translator so it is somehow a bias choice from me. Brain drain happens because most people are unsatisfied with their salary, so government should have a specific limit not just only for those labourer but for fresh graduates as well. The government also should open for more foreign investors to our countries that as well create jobs for people.”

Individual E:

“Most probably Singapore, judging from the closeness and it is legitimately our neighbour with close to sharing the same culture and belongings. And I enjoy the work-life balance there, being a counsellor you can be quite flexible there unlike here you requires a centre to prove you are a real deal as supposed this is already a small market in Malaysia. So, in order to improve the brain drain problem in Malaysia, besides from the racial problem which is something that cannot be changed overnight. The working environment from companies should make changes for more conducive learning environment and relax instead of ‘you should respect me because I work longer here than you do’ that kind of mentality. Another interesting way should be

returning policy be done by the policy maker which is giving more incentives to returnees and what not.”

Individual F:

“I have thought about Sweden because I genuinely like that country because of how high their GDP per capita, which is almost 5 times the amount in Malaysia. For those who live there must have a good life and I read about the healthcare in Sweden is fantastic, considering how small the population is, so you don’t need to worry about price or waiting list. And their work environment is very good, it’s like you are looking forward to work without the feeling doing a mundane chore. They have after work activities among the colleagues even team outings regardless of the scale of the company, this is at least coming from my friend who works in Sweden as a restaurant owner. To solve brain drain, Malaysia should start from the racial issue here and fight for equal opportunity for all before moving towards to other things.”

Individual H:

“I would love to emigrate to New Zealand, the place is wonderful, imagine waking up to an orchard and the lifestyle there is like going out for a stroll without having worry. With so less population in the country, you can apply anything from the government most likely than not you will get it like government work or even business permits. The Prime minister of New Zealand have been spotted in so many occasions just out in the public with the civilian without any security, from there you can tell this country does not focus too much on internal politics which is something I like. I think for brain drain to be solved, for one, you need to begin with loving your country, if you love your country you will stay to make it better in terms of its economy and your

contribution as a working member of the society and on a law making perspective, a strict number for emigration should be enforced to control the amount as the government should take this measure to their hand.”

Summary:

The purpose of asking respondents where would be their desirable destination for migration is evident to find out the comparison between countries from what is essentially lacking in our country and later improve from there. Through their given solutions to the brain drain issue, it should later be extrapolated from their perspective of resolving the problem which is crucial in bringing to the table as they are ultimately the target group in the phenomenon of brain drain. Based on the result, Singapore has proven to be the highest number as the desirable destination, standing 3 out of 7 of the total which only proves the proximity between countries that is discussed in literature review has a solid impact. Apparently, a small number of country’s population is an attraction for emigration such as Sweden and New Zealand as suggested by the respondents due to easier access to services and personal benefits like application for civil work or permits to businesses. Besides, a healthy work environment is yet another appealing reason for migration that fosters work-life balances and conducive to learning in nature. Other notable remarks are cleanliness and safety, culture experiences and advanced society that pull graduates to leave as supposed to what Malaysia is lacking from. On the other hand, the solutions are listed into:

- Policy makers (Government effort)

The salary distribution for graduates should be revised as some fields are more lucrative than the others. Besides, the inclusion of more foreign investors should be done to create job opportunities for graduates. The effort of increasing remittances to encourage talent return as well as allocating more funds on start-ups to promote working local culture among graduates. Policy makers should heighten the entry level for emigration to restrict talent to leave freely without substantial reasons or offer from other countries.

- Social and political adjustment (Government effort)

The political climate in Malaysia governed by power thirst leaders need to be replaced in order to improve political unrest and regain trust from talent to remain working locally. The social status of being a minority whom they face discrimination and unfair opportunities should be discarded and restore with equal ground of possibilities for all. Onto another unusual suggestion, one respondent mentioned the eradication of vernacular schools and replace with standardised schooling system in which eliminates elective languages such as mandarin and tamil will unify Malaysian hence why incubating love for the country in the process.

- Work environment (Private effort)

A conducive learning work environment is advised to solicit for better work-life balances and healthy work atmosphere among employers and subordinates. Besides, the hierarchical and bureaucratic work domain should be reworked to foster favourable and creative work space.

CHAPTER V: DISCUSSION AND CONCLUSION

5.1 Discussion of the study

It has never been clearer before that the desire to improve the quality of life is at paramount influence when it comes to brain drain issue in Malaysia. Among 10 graduates in this study, a whopping 7 of them choose to leave the country for their personal reasons, all ranging from the common monetary-based influence to simply just the idea of leaving this comfort bubble for a taste of the outside world when their age still allows them to do so. Aside from the chase for better living standard, the lack of job availability for certain industries have also contributed to be part of the problem, as it would be pointless for those who choose to stay but without a career position in the country. Hence, their only way around it would be leaving the country for possibilities out there. Another discernible cause of brain drain is pertaining to the political unrest in the eyes of young graduates. As they fear for the unobtainable future guided in the hands of power-gripping leaders, hence why posing no faith and expectation to remain in home country.

On an interesting note, this study does not intend to analyse the result based on the racial profile. However, to many surprise, the respondents' results seem to have indicated a pattern, when they are asked about whether to leave the country and they conjointly reflect on a similar reason of their action to one according race. First, when we look into the Chinese group, most of them have complaint over monetary-related problems that eventually prompt them to leave. While Singapore seems to be the favourable destination among the Chinese as well due to a number of reasons from being closer to home and sharing the same culture and language. On the other hand,

for Indians who decide to emigrate also show signs of answering pattern in which dissatisfaction over racial discrimination in Malaysia. While the remaining whom they are stern on the decision to stay locally are belonged to the Malay group which is the dominant race in Malaysia.

This is rather an interesting finding as this study has shown the race determines justification of leaving the country which is something needs to be worked on for future researches or any amendment from the country to look into, as to answer and rationalise the pattern from each race in terms of brain drain in Malaysia. While many are still dissatisfied with unequal ground of work opportunities, it is needless to say the tendencies to leave will only be higher, if that is indeed the case amongst minority graduates. The conspicuous frustration from the respondents in this study is non other than the pecuniary matter, from difference in income level, cost of living and currency exchange. All are money driven factor that lead to the intention to leave, which is brain drain in this case. Hence, in order to improve the situation, respondents have also suggested the authority in charge should revise the salary placement for young graduates, policy makers to provide higher remittances to encourage return, distribute additional funding for start-ups to create more job opportunities and improve work environment to adapt the new way of work etiquette for young graduates.

In order to explain the result with more precision, the application of Maslow's hierarchy of needs theory and the theory of reasoned action can paint an overall picture with more sense and order. Firstly, the discontentment of money-related and social status aspects are most mentioned which are affiliated with the top two layer of the pyramid of needs, self-actualization and esteem needs, which is also known as

growth need. From both level, there do not stem from the lack of something but instead, it has accurately represented the desire to grow as an individual and the desire for reputation in social class. In another word, respondents are still able to obtain an occupation in Malaysia regardless which has fulfilled their basic needs from the remaining bottom levels in the pyramid but the idea of deserving more and make progression motivate them to move up their level of needs that expresses one's potential, self-fulfilment, personal experiences, overall growth and esteem for oneself. Based on the result, respondents do not leave to get a job at foreign countries but more under the impression of getting a better job and expectation for improved living condition. Coming back to theory of reasoned action, it fundamentally describes a person's behaviour is influenced by intention. Thus, fostering an attitude towards a behaviour which later cause an action. This theory seeks to understand and predict graduates' voluntary behaviour to explain the action. In this case, the result has shown Singapore is being one of the most picked countries for desirable destination from graduates. While respondents have also explained their choice of option due to close proximity which has initially prompted an intention, from there, the attitude to leave strengthens which followed by the behavioural action to perform emigration. It is almost like the action is planned in a sense of reasoning that one perceives from the situation.

5.2 Limitation of Research

The restricting circumstance has occurred when face-to-face interviews were unable to conduct since the duration of this study was held in the midst of global pandemic, Covid-19. Only phone calls, emails and WhatsApp message were collected as a

means to graduates response to questions. Hence, many social cues and better elaborated explanations of reasons that can only be obtained through real-time interview are forced to ignore in order to continue this work of progress. Besides, the number of sampling has an uneven count for respondents based on their race, which poses as a significant variable in the research of brain drain phenomenon in Malaysia. Among 10 graduates, 8 of them are minority race, with only 2 remaining as the Malay respondents. Thus, it has limited the scope of the problem that is only targeting at the smaller group while neglecting the bigger number. Additionally, the lack of brain drain studies in local context has affected an insufficient information, while those available were mostly done in survey research that merely offered information at minimal and vague.

5.3 Recommendation for Future Study

Since the study of brain drain in Malaysia has only been at handful information and is relatively new. So, an in-depth research is suggested in order to target specific groups in designated field of study to examine on the impact of brain drain in their career choices. It aims to find out what is essentially lacking from our country to further aid and cater need to resolve the situation. Apart from that, a bigger size of participants should be included to affirm the reliability of test, at the same time, to discover more findings of the reasons to emigrate from graduates. Moreover, a study towards the effort from government and private industries to remain graduates should be done to give better insight in policies for tackling the phenomenon of talent loss. The study of race-based research on brain drain is plausible to inspect the existing findings that has identical result pattern from one ethnic group. Furthermore, an investigation on new

brain drain and old brain drain is proposed to differentiate emigration factors that is in before and current era in order to figure the trend that has shifted.

5.4 Conclusion

The phenomenon of brain drain in Malaysia is on the rise while some are still unaware of the situation. It is almost as if the emigration of young graduates is imminent, hence it has translated into a norm when graduates constantly ponder over outside opportunities that leads to a decrease number of talent in workforce. However, if such trend were to persist in longevity, soon enough Malaysia will fall into chasm of talent imbalances when input is unable to compensate the heavy output, especially towards our neighbouring country, Singapore. It has posed as being situated at a strategic location where distance is not too great from home and offers an immersing amount of job opportunities. According to the findings, it is no surprise that money is indeed the motivation to leave, most typically from the desire to keep up in the material world, when high currency rate from developed countries spur the purchasing process and assuage the tension to live paycheck to paycheck. Besides that, another striking reason for graduates to depart from Malaysia is due to social status. It is said that the unfair treatment in conferring job opportunities has limited certain groups of talent to obtain a preferable position at work. Not to be forgotten, the unstable political climate has shaken up young graduates' inclination to stay as they worry future will be in shamble with uncertainties. From an internal influence, the work structure from companies are described as old school and imbued with power trip from employers in which promoting an unfavourable alternative to work locally. In brief, the occurrence of brain drain in Malaysia happens in part because of exterior

persuasion which is pull factors from developed countries while domestic insufficiencies in our homeland, which is push factors has hasten the emigration process. In order to rectify the situation, apart from economy and development in Malaysia have to be improved, unity among races in addition to the love for our country need to be attained as well.

REFERENCES

- Ahmad, O. B. (2004). Brain drain: the flight of human capital: perspectives. *International Journal of Public Health*, 82(10), 797-798. Retrieved from <https://apps.who.int/iris/handle/10665/72992>
- AKM Ahsan Ullah. (2018). Skill drain from ASEAN countries: can sending countries afford? *International Journal of Development Issues*, 12(2). doi:10.1108/IJDI-12-2017-0210
- Ang, W. C (2012). Determinants of Brain Drain and The Impact of New Economic Model. Retrieved from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwj9rcHWiuXrAhWJYisKHxOyDH0QFjAAegQIAxA&url=https%3A%2F%2Fcore.ac.uk%2Fdownload%2Fpdf%2F11949629.pdf&usg=AOvVaw1YLT-Evguv5_7sI7yBCbUt
- Annamalah, S., Munusamy, J., & Sentosa, I. (2016). Middle income trap economies, the way forward in Malaysia. *SSRN Electronic Journal*, 17(3). Retrieved from https://www.researchgate.net/publication/310952129_Middle_Income_Trap_Economies_the_Way_Forward_in_Malaysia
- ASEAN. (n.d.). ASEAN Economic Community. Retrieved from <https://asean.org/wp-content/uploads/2012/05/7c.-May-2017-Factsheet-on-AEC.pdf>
- Awalluddin, M. (2019). Human capital management in Malaysia: issues and strategic measures. *Derleme Makalesi*. Retrieved from

https://www.researchgate.net/publication/332875629_HUMAN_CAPITAL_MANAGEMENT_IN_MALAYSIA_ISSUES_AND_STRATEGIC_MEASURES

Aytac, S., & Aydin, G. C. (2019). Analysis of the effects of pull and push factors on brain drain: An example of Turkey. *Journal of Social Economics Research, Conscientia Beam*, 6(2), 74-84. doi: 10.18488/journal.35.2019.62.74.84

Bach, S. (2003). International migration of health workers: Labour and social issues.

Retrieved from

https://www.researchgate.net/publication/242394141_International_Migration_of_Health_Workers_Labour_and_Social_Issues

Beine, M., & Docquier, F. (2007). Measuring international skilled migration: A new database controlling for age of entry. *The World Bank Economic Review*, 21(2). doi: 10.1093/wber/lhm007

Beine, M., Docquier, F., & Rapoport, H. (2001). Brain drain and economic growth: theory and evidence. *Journal of Development Economics*, 64, 275-289. Retrieved from

<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.471.5978&rep=rep1&type=pdf>

Beine, M., Docquier, F., & Rapoport, H. (2008). Brain drain and human capital formation in developing countries: winners and losers. *The Economic Journal*, 118, 631-652. Retrieved from

http://econweb.umd.edu/~Lafortune/puc-readings/Beine_Docquier_Rapoport_2008.pdf

Benefader, V., & Boer, K. D. (2006). To move or not to move, that is the question!

International Business Programme. Retrieved from

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rj>

a&uact=8&ved=2ahUKEwi6o9y8iOXrAhWYwjgGHY14CdkQFjAAegQIARA
B&url=http%3A%2F%2Fwww.diva-portal.org%2Fsmash%2Fget%2Fdiva2%3A
230503%2FFULLTEXT01.pdf&usg=AOvVaw086BabBi21Mrh3siPnfUdS

Bhagawati, J., & Hamada, K. (1973) The brain drain, international integration of
markets for professionals and unemployment: A theoretical analysis. (Working
paper 102). Retrieved from
[https://dspace.mit.edu/bitstream/handle/1721.1/63318/braindrainintern00bhag.pdf
f?sequence=1&isAllowed=y](https://dspace.mit.edu/bitstream/handle/1721.1/63318/braindrainintern00bhag.pdf?sequence=1&isAllowed=y)

Bhardwaj, B. (2017). Migration vulnerability: Role of digital media and internet in
stimulating and inhibiting brain drain. *International Journal of Advances in
Management and Economics*. Retrieved from
<file:///C:/Users/User/Downloads/24-69-1-PB.pdf>

Boyle, M. & Kitchin, R. (2014). Diaspora-centred development: current practice,
critical commentaries, and research priorities. *Global Diasporas and
Development*, 17-37. doi:10.1007/978-81-322-1047-4_2.

Carrington, W. J., & Detragiache, E. (1998). How big is the brain drain? *IMF
Working Papers* 98-102). Retrieved from
https://www.researchgate.net/publication/5126626_How_Big_is_the_Brain_Drain

Carrington, W. J., & Detragiache, E. (1999). How extensive is the brain drain?
Finance & Development, 36(2). Retrieved from
<https://www.imf.org/external/pubs/ft/fandd/1999/06/carringt.htm>

Carrington, W. J., & Detragiache, E. (2006). How big is the brain drain? (Working
paper 98-102). Retrieved from
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=882624

- Chandar, H., Jauhar, J., & Ghani, A. B. A. (2015). Postgraduates perception about the causes of brain drain among Malaysian professionals. *Problems and Perspectives in Management*, 13(2), 365-370. Retrieved from https://www.researchgate.net/publication/282955231_Postgraduates%27_perception_about_the_causes_of_brain_drain_among_Malaysian_professionals
- Choong, Y. O., Keh, C. G., Tan, Y. T., Lim, Y. H., & Tho, M. S. (2013). Propensity to work abroad amongst generation Y working adults in Malaysia. Proceedings of the International Conference on Social Science Research 2013 at Penang, Malaysia. Retrieved from https://www.researchgate.net/publication/283713682_PROPENSITY_TO_WORK_ABROAD_AMONGST_GENERATION_Y_WORKING_ADULTS_IN_MALAYSIA
- Choy, L.T. (2013). A study of political stability in Malaysia: A study about national civilian perception. *Journal of Humanities and Social Science*, 8, 92-146. Retrieved from <https://www.semanticscholar.org/paper/A-Study-of-Political-Stability-in-Malaysia%3A-A-Study-Choy/e366a4e77263e24e2f29471609718063d4d58863>
- Choy, L.T. (2013). A Study of Political Stability in Malaysia: A Study about National Civilian Perception. *IOSR Journal of Humanities and Social Science*, 8, 92-146. doi:10.9790/0837-08492146
- Commander, S., Kangasniemi, M., & Winters, L. A. (2004). The brain drain: Curse or boon? A survey of the literature. *National Bureau of Economic Research*. Retrieved from <https://www.nber.org/chapters/c9540.pdf>

- Cropley, A. (2019). Introduction to qualitative research methods: A practice-oriented introduction for students of psychology and education. doi: 10.13140/RG.2.1.3095.6888
- Dadzie, R. B. (2013). Economic Development and the Developmental State: Assessing the Development Experiences of Ghana and Malaysia since Independence. *Journal of Developing Societies*, 29(2), 123–154. doi:10.1177/0169796X13479711
- Dass, R. A. S. (2020). Brain drain In Malaysia: Why Malaysians don't want to come back home. *Malay Mail*. Retrieved from <https://www.malaymail.com/news/what-you-think/2020/07/06/brain-drain-in-malaysia-why-malaysians-dont-want-to-come-back-home-rueben-a/1881901>
- Dhesi, D. (2020). Stop the brain drain in advertising. *The Star*. Retrieved from <https://www.thestar.com.my/business/business-news/2020/01/20/stop-the-brain-drain-in-advertising>
- Docquier, F. (2006). Brain drain and inequality across nations. Paper presented at EUDN-AFD conference. Retrieved from <http://ftp.iza.org/dp2440.pdf>
- Docquier, F. (2014). The brain drain from developing countries. *IZA World of Labour* 2014, 31. doi: 10.15185/izawol.31
- Docquier, F., Olivier, L., & Marfouk, A. (2007). Brain drain in developing countries. *The World Bank Economic Review*, 21(2). Retrieved from https://www.researchgate.net/publication/4765339_Brain_Drain_in_Developing_Countries
- Dohlman, L., Meglio, M. D., Haji, J., & Laundanski, K. (2019). Global brain drain: How can the Maslow theory of motivation improve our understanding of

- physician migration? *International Journal of Environment Research and Public Health*, 16(7): 13. DOI: 10.3390/ijerph16071182
- Dunnwijik, T. (2008). Global Migration of the highly skilled: A tentative and quantitative approach. (Working paper 2008-070). Retrieved from file:///C:/Users/Owner/Downloads/wp2008-070.pdf
- Etikan, I. (2016). Comparison of convenience sampling and purposive sampling. *American journal of Theoretical and Applied Statistics*, 5(1): 1 doi: 10.11648/j.ajtas.20160501.11
- Fargues, P. (2011). International migration and the demographic transition: A two-way interaction. *International Migration Review* 45(3):588-614. Doi: 10.1111/j.1747-7379.2011.00859.x
- Fishbein, M.A., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. *US: Addison-Wesley*. Retrieved from <https://people.umass.edu/aizen/f&a1975.html>
- Flanja, D., & Nistor, R. (2017). Brain drain: Are we losing our minds? A Study on the Romanian human capital flight. *On-line Journal Modelling the New Europe*. Retrieved from https://www.researchgate.net/publication/322637880_Brain_drain_Are_we_losin_g_our_minds_A_study_on_the_Romanian_human_capital_flight
- Fong, T., & Zubair Hassan. (2017). Factors contributing brain drain in Malaysia. *International Journal of Education, Learning and Training*, 2(2). Doi: 24924/ijelt/2017.04/v2.iss2/14.31
- Foo, G. (2011). Quantifying the Malaysian brain drain and an investigation of its key determinants. *Malaysian Journal of Economic Studies*, 48(2): 93-116. Retrieved from <https://mjes.um.edu.my/article/view/2846>

- Ghani, A. B. A., & Jauhar, J. (2015). Brain drain of Malaysia talent to Singapore. Paper presented at The 7th International Conference of the Asian Academy of Applied Business (AAAB). Retrieved from <http://repo.uum.edu.my/id/eprint/24587>
- Girma, A. (2018). Brain drain in the social sciences: An examination of the emigration attitudes of social work students at Addis Ababa University. Retrieved from <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwikmoDLj-XrAhXCb30KHbq6AlcQFjAAegQIAhAB&url=http%3A%2F%2Fetd.aau.edu.et%2Fbitstream%2Fhandle%2F123456789%2F12421%2FAbraham%2520Girma.pdf%3Fsequence%3D1%26isAllowed%3Dy&usg=AOvVaw1O5p4mRw6UULPBaxITd-38>
- Grubel, H. B. (1966). The international flow of human capital. *International Economics*, 268-274. Retrieved from <https://core.ac.uk/download/pdf/56380379.pdf>
- Harnoss, J. D. (2011). Economic costs of the Malaysian brain drain: Implications from an endogenous growth model. *Malaysian Journal of Economic Studies*, 48, 117-130. Retrieved from https://www.researchgate.net/publication/289808085_Economic_costs_of_the_Malaysian_brain_drain_Implications_from_an_endogenous_growth_model
- Humphries, N., Tyrrell, E., McAleese, S., Bidwell, P., Thomas, S., Normand, C., & Brugha, R. (2013). A cycle of brain gain, waste and drain - a qualitative study of non-EU migrant doctors in Ireland. *Human Resources for Health*, 11(63). doi:10.1186/1478-4491-11-63

- Imran, N., Azeem, Z., Haider, I. I., Amjad, N., & Bhatti, M. R. (2011). Brain drain: post graduation migration intentions and the influencing factors among medical graduates from Lahore, Pakistan. *BMC Research Notes*, 4(1), 417. Retrieved from https://www.researchgate.net/publication/51725067_Brain_Drain_Post_Graduation_Migration_Intentions_and_the_influencing_factors_among_Medical_Graduates_from_Lahore_Pakistan
- Jauhar, J. & Yusoff, Y. (2011). Brain drain: propensity to leave by Malaysian professionals. *International Journal of Innovation, Management and Technology*, 2 (2), 119-122. Retrieved from <https://www.semanticscholar.org/paper/Brain-Drain%3A-Propensity-to-Leave-by-Malaysian-Jauhar-Yusoff/45a082eb798bb260efa074e1c4317978d9943558?p2df>
- Jauhar, J., Lim, H. K., & Haron, H. (2014). Brain drain: The determinant of migrant intention of professional engineers in Penang. *International Journal of Organisational Analysis*, 7, 114-124. Retrieved from https://www.researchgate.net/publication/280561347_Brain_Drain_The_Determinants_of_Migrant_Intention_of_Professional_Engineers_in_Penang
- Jauhar, J., Yusoff, Y. & Khoo, M.Y. (2009). Factors that drive brain drain of accountants in Malaysia. *Proceedings of the 6th International Conference on Intellectual Capital, Knowledge Management & Organizational Learning*, 164-176. Retrieved from https://www.researchgate.net/publication/280561447_Factors_that_Drive_Brain_Drain_of_Accountants_in_Malaysia

- Joyce, R. E., & Hunt, C. L. (1982). Philippine nurses and the brain drain. *Social Science & Medicine* pp: 1223-1233. Retrieved from:
<https://www.sciencedirect.com/science/article/abs/pii/0277953682901472>
- Kaukab, S. (2005). Situation of migration and potential available to reverse the brain drain - case from Pakistan. *Public Personnel Management*, 34(1), 103-112.
Retrieved from
<https://journals-sagepub-com.libezp2.utar.edu.my/doi/pdf/10.1177/009102600503400106>
- Kerr, S. P., Kerr, W., Özden, C., & Parsons, C. (2016). Global talent flows. (Working paper 17-026). Retrieved from
https://www.hbs.edu/faculty/Publication%20Files/17-026_a60ac33d-3fd5-4814-a845-137a38066810.pdf
- Kuhn, P., & McAusland, C. (2009). Consumers and the brain drain: Product and process design and the gains from emigration. *Journal of International Economics*, 78, 287-291. doi:10.1016/J.JINTECO.2009.03.001
- Kwok, V., & Leland, H. (1982). An Economic Model of Brain Drain. *American Economic Review*, 72(1), 91-100. Retrieved from
https://www.researchgate.net/publication/4728293_An_Economic_Model_of_Brain_Drain
- Lim, W. T. L. (2014). Framing the Malaysian brain drain: A comparison between the reporting styles of The Star online vs Malaysiakini. *The Journal of the South East Research centre*, 1(6): 97-121. Retrieved from
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwi3jvH5geXrAhUDU30KHayVDtQQFjABegQIAxAB&url=http%3A%3A>

2F%2Fsearch.taylors.edu.my%2Fdocuments%2Fjournals%2F2014-6-1%2FSEARCH-2014-6-1-J6.pdf&usg=AOvVaw3L59rdRZO0z03GNmszr5W

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. Retrieved from <https://doi.org/10.1037/h0054346>

Mejia, A., Pizurki, H., & Royston, E. (1979). Physician and nurse migration: Analysis and policy implications. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/37260/9241560592.pdf>

Mohammad Reza Iravani. (2011). Brain drain problem: A review. *International Journal of Business and Social Science*, 2(15). Retrieved from http://ijbssnet.com/journals/Vol_2_No_15_August_2011/32.pdf

Narayanan, S., & Lai, Y.-W. (2014). Immigrant Labor and Industrial Upgrading in Malaysia. *Asian and Pacific Migration Journal*, 23(3), 273–297. doi:10.1177/011719681402300302

National Economic Advisory Council. (n.d.) New economic model for Malaysia part 1. Retrieved from https://www.pmo.gov.my/dokumenattached/NEM_Report_I.pdf

Ong, J. (2020). Malaysia losing talent it needs to climb world ladder, Fitch Unit says. *Malay Mail*. Retrieved from <https://www.malaymail.com/news/malaysia/2020/06/25/malaysia-losing-talent-it-needs-to-climb-world-ladder-fitch-unit-says/1878715>

Özden, C., & Schiff, M. (2006). International migration remittances, and the brain drain. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/6929/339880rev.pdf?sequence=1&isAllowed=y>

- Polimeni, J. M., & Iorgulescu, R. (2008). Understanding the brain-drain from the capital district of New York State. *International Business & Economics Research Journal*, 7(7). doi:10.19030/iber.v7i7.3271
- Qadri, B. (2017). Brain drain from developing countries-causes, consequences and remedial measures. Paper presented at Indira Gandhi National Open University, New Delhi, India. Retrieved from https://www.researchgate.net/publication/325534827_Brain_drain_from_developing_countries-causes_consequences_and_remedial_measures
- Rahman, R. H. A. (2012). Malaysian Firms' Role in Retaining Engineers. *The Economic and Labour Relations Review*, 23(4), 57–78. <https://doi.org/10.1177/103530461202300405>
- Ramoo, B. (2018). Brain drain phenomenon in Malaysia - Analysis of the engineers' intention to migrate abroad using the extended theory of planned behaviour. (Doctoral dissertation). Retrieved from <http://eprints.utar.edu.my/3017/1/DBA-2018-1206071-1.pdf>
- Roudgar, I., & Richards, C. K. (2015). The policy challenge of the global brain drain: Addressing the dilemmas of contributing push-pull factors. *International Journal of Public Policy* 11(1). doi: 10.1504/IJPP.2015.068841
- Schiff, M. (2005). Brain Gain: Claims about its Size and Impact on Welfare and Growth Are Greatly Exaggerated. *IZA Discussion Paper No(1599)*. Retrieved from: https://www.researchgate.net/publication/5135820_Brain_Gain_Claims_about_Its_Size_and_Impact_on_Welfare_and_Growth_Are_Greatly_Exaggerated

- Sidhu, J. S. (2011). The scramble for skills. *The Star*. Retrieved from <https://www.thestar.com.my/business/business-news/2011/02/12/the-scramble-for-skills>
- Singh, J., & Krishna, V. V. (2015). Trends in Brain Drain, Gain and Circulation: Indian Experience of Knowledge Workers. *Science, Technology and Society*, 20(3), 300–321. doi:10.1177/0971721815597132
- Stark, O., Prskawets, A., & Helmenstein, C. (1997). A brain gain with a brain drain. *Economic Series*, 45. Retrieved from <https://www.econstor.eu/handle/10419/70110>
- TalentCorp Malaysia. (n.d.). Talent roadmap. Retrieved from https://www.talentcorp.com.my/clients/TalentCorp_2016_7A6571AE-D9D0-4175-B35D-99EC514F2D24/contentms/img//Talent%20Roadmap%202020_compressed.pdf
- Tessema, M. T. (2010). Causes, challenges and prospects of brain drain: The case of Eritrea. *Internation Migration* 48(3):131-157.
DOI :10.1111/j.1468-2435.2009.00585.x
- Thaib, L. (2013). Human capital development from Islamic perspective: Malaysia's experience. *Political Science*. Retrieved from <https://www.semanticscholar.org/paper/HUMAN-CAPITAL-DEVELOPMENT-FROM-ISLAMIC-PERSPECTIVE%3A-Thaib/b42fe4fc9c648867f5eef6a956ad36c7dcb94aed?p2df>
- Tham, S. Y. (2013). Internationalizing higher education in Malaysia: Government policies and University's response. *Journal of Studies in International Education*, 17(5), 648–662. <https://doi.org/10.1177/1028315313476954>

- The World Bank. (2011). Malaysia Economic Monitor. Retrieved from
<http://documents1.worldbank.org/curated/en/282391468050059744/pdf/614830WP0malay10Box358348B01PUBLIC1.pdf>
- The World Bank. (2011). Migration and remittances Factbook 2011 (2nd e.d.). Retrieved from
<https://emnbelgium.be/sites/default/files/publications/factbook2011-ebook.pdf>
- The World Development Report (2015). Mind, Society And Behavior. *A World Bank Group Flagship Report*. Retrieved from
<https://www.worldbank.org/en/publication/wdr2015>
- United Nations. (2013). World migration in figures. Retrieved from
<https://www.oecd.org/els/mig/World-Migration-in-Figures.pdf>
- World Bank DRG. (2019). Leveraging economic migration for development - A briefing to the World Bank Board. Retrieved from
https://www.knomad.org/sites/default/files/2019-08/World%20Bank%20Board%20Briefing%20Paper-LEVERAGING%20ECONOMIC%20MIGRATION%20FOR%20DEVELOPMENT_0.pdf
- World Health Organization. (n.d.) Migration of health professionals in six countries: A synthesis report. Retrieved from
<https://www.afro.who.int/publications/migration-health-professionals-six-countries-synthesis-report>
- Yeo, S. Y., & Leu, J. F. Y. (2014). The recruitment of migrant workers in the food service industry in Malaysia. A study of Old Town White Coffee and Pappa Rich Kopitiam. *International Journal of Business, Economics and Management*, 10(1): 291-304. Retrieved from
<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2>

ahUKEwj80fL4jeXrAhUNILcAHWs0DbIQFjAAegQIBBAB&url=http%3A%2F%2Fwww.conscientiabeam.com%2Fpdf-files%2Feco%2F62%2Fijbem-2014-1(10)-291-304.pdf&usg=AOvVaw1vBiObrdPIHXXH_Vtfyqhfn

Yeow, J., Ng, P. K., Chin, T., & Boo, S. (2013). Brain drain in Malaysia: Undergraduate students perception. Proceedings of the International Conference on Economics and Business Research, Penang, Malaysia. Retrieved from https://www.researchgate.net/publication/239950378_Brain_Drain_in_Malaysia_Undergraduate_Students_Perception

Ziguras, C., & Gribble, C. (2015). Policy responses to address student “brain drain”: An assessment of measures intended to reduce the emigration of Singaporean international students. *Journal of Studies in International Education*, 19(3), 246–264. doi:10.1177/1028315314561121