

BRAIN DRAIN OF MALAYSIAN TALENT TO SINGAPORE

Ahmad Bashawir Abdul Ghani^a and Junaimah Jauhar^b

ABSTRACT

Globalization has inadvertently brought about the global war for talent. The competition for talent is not merely confined to companies but has extended to countries. Countries with the best talents are the ones most likely to attract foreign investments. As foreign companies and entrepreneurs mull over which Asian country to base their business operations in, the availability of a productive, cost-effective, and efficient workforce definitely plays in favor of a given business jurisdiction. This article was motivated by the increasing number of Malaysian professionals fleeing the home country to serve in foreign lands. With the Prime Minister's agenda of trying to achieve the high income nation status before 2020 at hand, this has been a critical issue and warrants immediate attention. This article addresses the need of these experts here in the home country to improve the nation's economy. While the country is losing high skilled labor, it is only able to attract low skilled labor. Also the main concern is that Malaysia is losing its most talented citizens to its closest neighbor such as Singapore, Australia and also to the USA, UK, Hong Kong just to name a few. This article looks at factors that have led to the Brain Drain phenomenon and intends to put forward efforts in order to overcome this predicament.

Keywords: Brain Drain, NEM, Voluntary Turnover, Intention to turnover, Accountants, personality

1. Introduction

It is estimated that some 215 million people, or three percent of the world's population, are living in countries other than countries of birth (World Bank, 2011). Such movement of people across international borders has enormous economic, social and cultural implications for both origin and destination countries. Yet, until recently, the impact of migration on sending and receiving countries was highly under-researched, mainly due to scarcity of data and political sensitivities.

International labor migration theory maintains that there is a relationship between a nation's human capital stock and its ability to develop economically (Cassarino, 2004). (Karthigesu, 1986) adds that according to the human capital theory there is a close relationship between economic growth and human capital; and higher education is defined in terms of the "needs" of the economy. Higher education institutions have the main responsibility for training a country's higher level professionals, technical and managerial personnel. Malaysia faces an exodus of talent. Not only is the education system failing to deliver the required talent, Malaysia has not been able to retain local talent of all races nor attract foreign ones due to poor prospects and a lack of high-skilled jobs. (NEAC, 2010a, p.60)

2. Background

The beginning of Malaysia's brain drain can be traced back to 1963 when Malaysians began to seek overseas tertiary education soon after independence in 1957. The higher education system in Malaysia which started with a few elitist public institutions has expanded tremendously over the last twenty five years through the establishment of first and second tier institutions in both the public and private sectors.

The functions of the public universities are to promote national integration and unity; to provide trained and skilled human resources; and to rectify existing imbalances in educational opportunities among racial groups (Sharom, 1985). In the case of Malaysia, the government views access to higher education as a means of restructuring the Malaysian society and to eliminate the identification of ethnic community with economic functions. For the past twenty five years, there have been concerted efforts to provide more educational opportunities to the Bumiputras. Bumiputras mean "native of the soil". This term is used to mean the Malays and other indigenous tribes such as Kadazans and Dayaks.

To achieve this objective, the Malaysian government implemented the "racial quota" policy whereby students' admission to public institutions of higher learning and the appointment of academic staffing in these institutions are based on racial quotas in favor of the Bumiputras. Under the racial quota policy, not only the appointment of academic needs to reflect the ethnic composition of the country's population, but also greater Bumiputras' representation in key administrative positions in the universities (Jaspir 1989). The implementation of this policy has eroded one of the deeply entrenched academic traditions which is to admit students and to appoint faculty members based on merits. This policy has led to the emergence of an even more polarized society instead of promoting national integration. Because of the quota system and the limited number of places in the public institutions of higher learning, many non-Bumiputra students who are as qualified are denied places locally and are forced to go overseas at very high expenses or to seek further education in the private colleges.

Skilled migration or equally known as "brain drain" continues to take place regardless of the remedies that have been attempted since it is part and parcel of the globalization process. In fact such migration has been on the rise in the past few decades (Malhotra, 2009). One important implication of the brain drain is that investment in education in a developing country may not lead to faster economic growth if a large number of its highly educated people leave the country. (Carrington & Detragiache, 1999).

When the twentieth century came to a close, international migration had become part of the region's economic, social and political fabric. As of 2000, there were 49.9 million international migrants in Asia and 5.8 million in Oceania, accounting for 29 and 3 per cent, respectively, of the 175 million international migrants worldwide. Excluding refugees, the International Labour Organization (ILO) estimates that of the 86 million migrant workers worldwide (ILO, 2004:7) some 22.1 million were economically active in Asia and some 2.2 million in Oceania (27 and 4 per cent, respectively), (Asis, 2005).

Between 1960 and 2005, the world's registered migration increased to an average of 919,302 per nation. In 1960, there were 9,576 Malaysians residing abroad however, in 2005, the number soared to 1,489,168, according to World Bank statistics (World Bank, 2005). Malaysia is losing people at a higher rate than any other nations. A high percentage of this outflow is skilled labor. (Dewi and Cheah, 2007) wrote that by the time the expected developed nation status finally materialized, the shortage of 60,000 accountants will emerge. Massive brain drain has been occurring and this scenario has caused shortage of accountants in Malaysia.

The Malaysian Institute of Accountants (MIA) president, Encik Nik Hasyudeen Yusoff said that accountants are migrating for better job opportunities overseas. He said this at the Accountancy Fair 2007 jointly organized by MIA and the Universiti Sains Malaysia in September, 2007. He also revealed that the country's accountants were being sought after by various countries and he stressed that if necessary steps were not taken, Malaysia would be facing a shortage of approximately 60,000 accountants by the year 2020 (Yusoff, 2007).

The Malaysian Institute of Accountants is the body responsible for regulating the accountancy profession in Malaysia. It is an agency under the Ministry of Finance and reports directly to the Accountant General Office. As at 30 June 2008, MIA has 24,719 members of which 65% are involved in commerce and industry, 27% in public practice and 7% in government and other sectors. Selangor and the Kuala Lumpur Federal Territory have the largest concentration of MIA membership with 9,697 and 6,118 members respectively (Loh, 2013).

With demand for skilled professionals from the field on the rise globally, Malaysia has witnessed a steady outflow of accounting experts to China, Hong Kong, Singapore and, more recently, the UK. The local Big Four have experienced talent poaching not just from their competing counterparts in the UK but also from smaller accounting firms abroad (World Bank, 2011).

The exodus began when China opened up, creating a demand for accounting, auditing and tax experts. Given the language requirements, Singapore and Malaysia naturally fed that demand. Then came the new accounting standards in the US and UK which drew the next wave of talent out of Malaysia. (www.pwc.com/my/en/issues/outflow.jhtml). Various factors are contributing to this talent migration. With new requirements under the International Financial Reporting Standards (IFRS) and the post-Enron introduction of the Sarbanes-Oxley legislation, regulatory and reporting standards have become so much more complex, requiring a larger number of people to service a single client. (www.pwc.com/my/en/issues/outflow.jhtml). There has also been an increase in corporate governance and risk management requirements. In addition, the financial sector has developed new financial structures. Combined, all of these have increased accounting complexities and hence explains the rise in demand for accountants.

Malaysia offers the global market a pool of highly skilled, adaptable and language-efficient accountants, explains Dato' Johan Raslan, executive chairman of PricewaterhouseCoopers in Malaysia. "We are the training ground and our accountants are able to fit right into the spots opening up elsewhere," he says.

In The Star Sunday dated May 4, 2008, CPA Australia (Malaysia) President Christina Foo said, "There is a shortage of accountants in Malaysia; this is a world trend" whereas in the CPA Singapore website, it was stated that "To make up for shortfall, firms are looking overseas. Indeed, 67% of the firms surveyed indicated that they are sourcing for audit staff from overseas. Their sources of audit professionals are mainly Malaysia (34%), China (21%), Philippines (16%), Indonesia (9%) and others (20%) like Australia, Hong Kong, India, etc". Currently, there are about 25,000 accounting professionals who are registered with the Institute of Certified Public Accountants of Singapore (ICPAS). In addition to this, Singapore's second Prime Minister, Goh Chok Tong, in his speech during National Day Rally Speech 1997 said that, "Foreign talent is a matter of life and death for us in long term. If we do not top up our talent pool from the outside, in 10 years time, many of high valued jobs we do now will migrate to China and elsewhere, for lack of sufficient talent here (Goh, National Day Rally Speech, 1997). Although accountants' compensation packages in the Malaysia have continued to improve annually, there has been little improvement to the work-life balance problem. Firms are working hard to address issues

of talent retention."We are trying to understand what people want, improve transparency during the hiring process and change the way we relate or engage with our staff," says Johan(www.pwc.com/my/en/issues/outflow.jhtml).

3. Seriousness of the problem

The setting up of the Talent Corporation explains why the Federal Government seems rather anxious to draw back some of this talent and thus reflects the seriousness of the underlying issue. According to the Minister in the Prime Minister's Department, Tan Sri Nor Mohd Yaacob, this corporation hopes to draw back at least 70,000 Malaysians from overseas over the next 10 years by offering a package of very attractive incentives.

This is not the first time the Federal Government has taken the initiative to lure Malaysian talents back. It has previously attempted this through several programs. The Malaysian government in its effort to call home professionals abroad as well as to attract foreign talents and high net worth individuals to Malaysia have embarked on a series of programs:

- i. Returning Scientist Program launched in 1995(www.mosti.gov.my/.../brain%20gain%20workshop%2018%20jun%20200),
- ii. Returning Expert Program launched in 2001(osc.mohr.gov.my/)
- iii. Brain Gain Malaysia" in 2006 as part of the Ninth Malaysia Plan(www.nitc.my/index.cfm?&menuid=94&parentid=93)
- iv. The Malaysia My Second Home" launched in 2004. The MM2H program was re-launched by the Ministry of Tourism, Malaysia in April 2006. (<http://mm2h.gov.my/>).

However, response to these packages from those who have migrated has been poor. For instance "Returning Scientist Program" launched in 1995 which ended prematurely three years after its launch, managed to attract only 93 researchers, scientists, engineers, 70 of whom were foreigners, and 23 Malaysian. The on-going "Returning Expert Program" on the one hand has attracted less than 600 returnees since its inception (International Herald Tribune, 2 October, 2010).

4. Background of Singapore

Singapore has the best environment, facilities and infrastructure available for citizens to enjoy good quality life due to its stable political climate, world-class transportation and healthcare system as well as entertainment variety (Mercer Survey, 2011). In Asia she is ranked 25 for the country with best quality of life. Singapore has a consistently productive and skilled labour force that makes it a conducive place for growing business (Business Environment Risk Intelligence, 2011). Singapore is also ranked number 1 for the labour force in terms of workers productivity and general overall attitude, as displayed by superior business performance with advanced technology and low labour unit costs in relation to the value of goods and services produced (Business Environment Risk Intelligence, 2011).

Singapore's tax system is a huge incentive for MNCs to relocate some of their top management executives. The top personal income tax rate is as low as 20% and there are other tax incentives that one can enjoy. Apart from the tax system, Singapore's biggest advantage is that it offers a westernized environment where English is widely spoken. The city is a melting pot of cultures and expats find it easier to settle down than most other countries in the region. The country houses some of the top educational institutes in the world; health-care services are not only of international standards but are affordable as well; pollution levels are low and the city is environment friendly; the efficiency of institutions, whether public or private, is top-notch; and the country offers a safe and secure environment with low crime rates. Moreover, MNCs not only find it easy to setup a company in Singapore but also find it relatively simple and quick to relocate their staff owing to Singapore's work visa schemes.

Career opportunities of the employee's spouse, children's education, career setbacks and unpopular locations are some of the major challenges that companies face while relocating their staff. However, Singapore's popularity and unique advantages are likely to mitigate these concerns for most expatriates. (<http://www.guidemesingapore.com/blog-post/singapore-life/singapore-among-top-locations...>). Singapore's employment (work pass) entry requirements demonstrate the government's preference for the "right type" of workers, that is, those who possess skills and talents. The current immigration framework has also progressively been modified to attract those with higher qualifications, as well as businesspeople and entrepreneurs (Amarjit & Metcalfe, 2007). The Singapore Landed Permanent Resident (LPR) program allows the potential overseas aspirant to file application for a Singapore Permanent Resident status and is destined for those attired with exceptional profile, skills, experience and/ qualification in the niche demanded in Singapore (<http://www.abhinav.com/singapore-immigration/landed-permanent-resident-visa.aspx>)

A survey conducted by HSBC Bank International unveils that Singapore's expatriate population earns the highest income in the world as compared to their counterparts in other countries. One of the main reasons behind Singapore's huge percentage of expats with higher disposable incomes is Singapore's tax system. The country imposes one of the least rates of personal and corporate income tax, enabling its residents to retain a higher portion of their income. Singapore's personal income tax rate starts at 0% and is capped at 20% (above S\$320,000) for residents and a flat rate of 15% for non-residents. Evidently, Singapore is fast becoming one of the most attractive expat destinations for more reasons than one. The quality of life; safe living environment; excellent health-care, schooling and accommodation facilities; plentiful job opportunities; a low tax system are but some of the factors that are attracting foreign professionals and entrepreneurs. (<http://www.guidemesingapore.com/blog-post/singapore-life/singapore-expats-earn-highest..>).

5. Theories underpinning the BD issue

Researchers have postulated various theories to explain as to why emigration or in this case, brain drain occurs. Amongst them are the International Labor Migration theory and Human Capital Theory.

The **neoclassical migration theory** consists of two complementary macro-level and micro-level dimensions that explains the movement of labor across borders. This theory postulates that nations with large pools of labor will send this labor to other countries in search of higher wages. The assumptions that underpin the micro-level neoclassical model of international labor migration are similar to the premises of macro level theory. In addition, however, the micro-level perspective acknowledges individual variations in self-selection by human capital endowments. In other words, skill levels vary from one individual to another individual, as do opportunities to enhance skills by moving abroad. Still, as in macro-level theory this perspective presumes that migration will not take place without earnings and potential employment rates between countries.

Governments can influence migration flows through policies that affect earnings/employment differentials, e.g., national economic development programs and/or policies that "impact upon costs, both material and psychological" (Massey et al., 1993, p. 436). The former would include taxes, restrictions, or outright bans on outward migration, the latter would include factors that bind the individual to his or her homeland (appeals to patriotism) and/or household unit (appeals to family unity).

The assumptions of the "new economics" perspective do not conflict with those of neo-classical theory, but they are nevertheless different. First, households, rather than individuals, are the basic migration decision-making units. Second wage differentials are not necessarily the primary determinant of migration and there are strong incentives for households to engage simultaneously in both works abroad and in sending countries.

Third, the new economics of labor migration model implies that labor outflows may not end even if wage differentials between sending and receiving nations are reduced or even equalized. In this model, governments can influence outward migration through measures that extend beyond the domain of labor markets *per se*, including policies that affect earnings insurance (unemployment payments) and

futures/credit markets, e.g., encouraging the development of private lending institutions (Massey et al., 1993, p. 439- 440).

Nevertheless, like the **dual labor market theory** with which it is coupled by Massey et. al., (1993), world systems theory yields the conclusion that there is virtually nothing that sending country governments can do to influence/curtail outward labor migration effectively as a whole or "brain drains" in particular. Congruent with dual labor market and world systems perspectives on the causes of international labor migration, what Massey et al. (1993) referred to as Institutional Theory maintains that cross-border human capital movements are sustained, in large part, by intermediary agents that benefit directly from the migration process itself. These intermediaries include legitimate labor recruiting agencies, as well as black market entrepreneurs, such as criminal groups that guide immigrants across the Mexican border, or agencies that arrange marriages between foreigners and citizens of labor-importing countries (Massey, 1993).

In effect, the cumulative causation model points out that, independent of social network influences *per se*, the impact of prior migration upon the propensity of individuals to leave their homelands is generally self-perpetuating. Once initiated, outward labor migration affects the sending nation's economy and society in a manner that tends to enhance the perceived benefits and to reduce the perceived costs of migration.

Human Capital Theory. Wikipedia explains human capital as the stock of competences, knowledge and personality attributes embodied in the ability to perform labor so as to produce economic value. It is the attributes gained by a worker through education and experience. Many early economic theories refer to it simply as workforce, one of three factors of production, and consider it to be homogeneous and easily interchangeable.

The Human Capital theory was proposed by Theodore William Schultz (1961) and developed extensively by Gary Stanley Becker (1964). Becker explained in his publication titled "Human Capital: A theoretical and Empirical Analysis with special reference to education" that Human Capital Theory has been developed in the sixties due to the realization that the growth of physical capital has only a small part of growth in the growth of income. Relatively, the emergence of education and skills training in military technology has also played an important part in the discovery of this theory.

According to the theory, human capital theory suggests that education or training raises the productivity of workers by imparting useful knowledge and skills, hence raising workers' future income by increasing their lifetime earnings (Becker, 1994). It postulates that expenditure on training and education is costly, and should be considered an investment since it is undertaken with a view to increasing personal incomes. The human capital approach is often used to explain occupational wage differentials. Human capital can be viewed in general terms, such as the ability to read and write, or in specific terms, such as the acquisition of a particular skill with a limited industrial application.

In his view, human capital is similar to "physical means of production", e.g., factories and machines: one can invest in human capital (via education, training, medical treatment) and one's outputs depend partly on the rate of return on the human capital one owns. Thus, human capital is a means of production, into which additional investment yields additional output. Human capital is substitutable, but not transferable like land, labor, or fixed capital.

Maslow's Hierarchy of Needs. Maslow's Hierarchy of Needs (Hodgetts, Luthans & Doh, 2006) postulated that all individuals have five basic needs; physiological to safety to social to esteem and finally to self-actualisation. However, lower level needs must be satisfied first before higher level of needs can be motivators. Once satisfied, the need will no longer be a motivator. The brain drain phenomenon can be related to the Hierarchy of Needs. For instance, once an accountant has satisfied the basic needs for clothing, food and shelter, he or she will proceed to desires for security and stability. From there, he or she will long for social interactions with others and then, he or she will seek for power and status.

Maslow's ideas are very helpful for understanding the needs of people at work and considering what can be done to satisfy them. His theory advises managers to recognize that deprived needs may result in negative attitudes and behaviors (Schermerhorn, 2005).

Categorised in the esteem needs are the need for power and status. According to Esch (2008), “Social status syndrome is infecting today’s social climbers. Obsessed with documenting and exhibiting their wealth, these people run the risks of developing depression if they fail to set trends. Along with money, comes status (SkyNews, 2008). Therefore, individuals are always racing against time to reap greater wealth. Therefore, many are spellbound by the charm that comes with cash. Due to that, as well as natural human greed, individuals are lured by **higher salary offers abroad**. Other than the need for esteem, individuals do crave for self actualization more and more. The means to achieve this need are education, religion, maturity, experience and so on. Therefore, individuals are exploring foreign lands to look for a new home with better environment that can foster enhanced wellbeing. It could be the consequence of the perception of the grass is always greener on the other side of the fence.

In the study by Huang et al, 2007, the authors define **QWL** as favorable conditions and environments of work and life aspects such as family/work life balance, self-actualization, compensation and supervisory behavior. (Huang et al., 2007) stated that previous studies have demonstrated the importance of balance between family and work life but few have included Quality Work Life and job related attitudes. Findings indicated that different dimensions of QWL result in distinctive effects on organizational and career commitments and turnover intention. In this paper, I shall be looking at QWL’s impact on Malaysian accountants’ brain drain.

Ease of immigration procedures. One of the central drivers of the brain drain is the increasing skill focus of rich-country immigration policies.(Kapur & McHale, 2006). The trend both in the rhetoric and reforms suggests governments see increasing advantage in more targeted recruitment. The pioneers in such skill-focused immigrant recruitment are Australia and Canada. In the 1960s and 1970s, these countries put in place skills-based points systems to target those most likely to be successful in host-country labor markets.

In recent years, both have steadily increased the share of immigrants coming through the skill stream, and have reformed their systems to better target the most skilled. Germany put in place a “green card” program to offer temporary visas for skilled workers, and also offered new opportunities for permanent migration (though legislative opposition forced the government to abandon its plan for a points-based system).

International Exposure. Studies suggest that leaders with global experience are more effective at leading MNCs than those who lack significant experience overseas (Carpenter, Sanders, and Gregersen 2001); Daily, Certo, & Dalton, 2000; Roth, 1995). Carpenter et al argued that executives with international experiences are likely to be a valuable, rare, and inimitable resource for MNCs, studies also suggest that leaders with global experience are more effective at leading MNCs than those who lack significant experience overseas.

Two Factor Theory. Based on the Two Factor Theory (Luthans and Doh, 2009), two factors which are hygiene factors and motivators shape job satisfaction. **Expanded job scope and opportunities** for advancement are categorized as motivators, whereas higher salary that was mentioned in the earlier section should be included in the hygiene factors. If hygiene factors are not fulfilled, they will lead to dissatisfaction whereas the presence will not lead to satisfaction. Instead, motivators bring satisfaction but the absence will not lead to dissatisfaction. Therefore, we can understand that brain drain strikes us because accountants in Malaysia are not entirely satisfied with their jobs; hence the emigration.

Social Networks. Formal as well as informal social relations have become important explanatory variable in organizational research. Each individual is surrounded by a specific network of social relations. This structure of relations is referred to as the social network. The structure and the content of these social networks are believed to influence the attitudes and the behaviour of people in many ways. Outside of the microeconomic framework, migration scholars have emphasized for some time the importance of social relationships in influencing migration decisions (Stark & Bloom, 1985; Massey et al., 1998; Taylor, 1999; Robinson & Carey, 2000; Raghuram, 2004; Ackers,2004; Ley&Kobayashi,2005).

Non-economic factors such as family members, friends, colleagues and professional contacts are considered critical in influencing migration decisions. The new economics of migration theory, for

example, argues that migration decisions are not made by isolated individual actors, but by larger groups of related people such as families (Massey et al., 1998). Chain migration is an important aspect of migrant social networks and it describes the way in which a large number of people from the same home country move to another country. The theory argues that potential migrants use their social networks with migrants who have recently integrated to help provide them with detailed information.

The social capital theory predicts that people who are socially related to current or former migrants have access to social capital that significantly increases the likelihood that they themselves will migrate. This hypothesis has been sustained in a large number of studies in large and diverse settings (Massey et al., 2001)

Personality Trait: The Big Five Model

An individual’s personality is the unique combination of psychological characteristics that affect how a person reacts and interacts with others. Personality like attitudes, affects how and why people behave the way they do. The five personality traits in the Big Five Model are:

1. Extraversion: The degree to which someone is sociable, talkative, and assertive
2. Agreeableness: The degree to which someone is good-natured, cooperative, and trusting
3. Conscientiousness: The degree to which someone is responsible, dependable, persistent, and achievement oriented
4. Emotional stability: The degree to which someone is calm, enthusiastic, and secure (positive) or tense, nervous, depressed, and insecure (negative).
5. Openness to experience: The degree to which someone is imaginative, artistically sensitive, and intellectual.

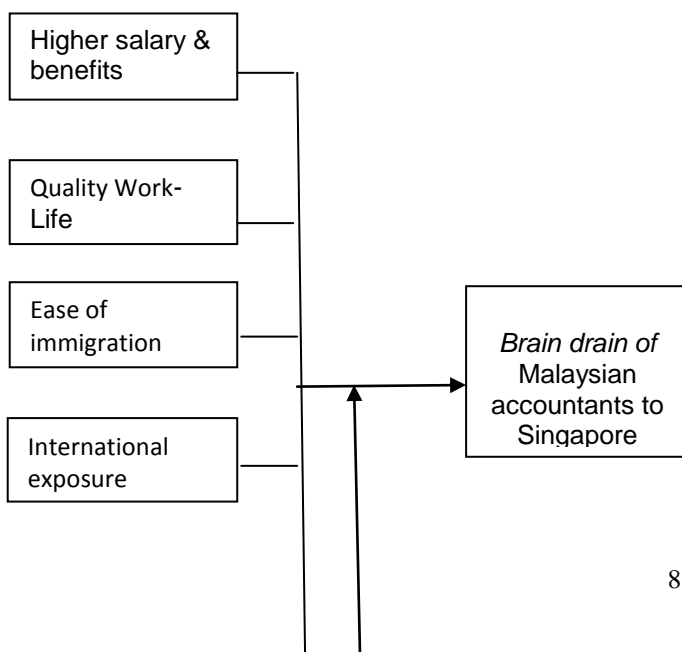
Researchers have argued that individuals are more likely to adjust to new work environments when they have proactive personalities or engage in proactive behaviors, such as information-seeking (Grant & Ashford, 2008).

5. Theoretical Framework

Based on the review of theoretical arguments of the study’s variables as well as the recommendations of previous related empirical efforts, the research model as illustrated in Fig 5.1 was constructed to investigate the relationships expected in this study.

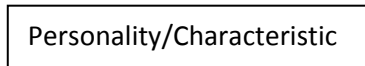
The major area of interest in this model is brain drain of Malaysian accountants to Singapore. The independent variables comprise of 5 major predictors and 1 moderating predictor:- Higher salary & benefits program, QWL, Ease of immigration procedures, International exposure, More promising job opportunities & more challenging job scopes, Social network and Personality/characteristics

From the hypotheses above, the theoretical framework is developed:





Independent Variable



Moderating Variable

5. Methodology

5.1 The Population

Population refers to the entire group of people, events, or things of interests that the researcher wishes to investigate (Sekaran, 2003). The target population for this is accounting firms in Malaysia.

5.2 The Unit of Analysis

The unit of analysis refers to the level of aggregation of the data collected during the subsequent data analysis stage (Sekaran, 2003). In this study, the unit of analysis is individuals attached to the accounting firms and they are categorized according to their level in the management; top management which includes directors, CEO, senior managers, partners and junior accountants.

5.3 Sample size

With regards to the sufficient number of respondents for this study, Roscoe (1975) suggested that the sample size should be several times (preferably 10 times or more) as large as the number of variables in the study (Sekaran, 2003). Additionally, Hair, Black, Babin, Anderson and Tatham (2006) suggested that the sample size for factor analysis should be 100 or larger.

As a general rule, the minimum sample size is to be at least five times as many observations as the number of variables to be analyzed (Hair et al., 2006). Specifically, for multiple regression analysis, a minimum sample of 50 and preferably 100 observations is needed for most research situations in order to maintain power at 0.80 (Hair et al., 2006). A minimum ratio of observations to variables is 5:1 is recommended in multiple regression (Hair et al., 2006).

6. Measurements of the variables

Independent Variables

1. Higher salary & benefits program (adopted from Jauhar, et al, 2009)

The Malaysian Institute of Accountants (MIA) president, Encik Nik Hasyudeen Yusoff said that accountants are migrating for better job opportunities overseas. Better pay and benefits offered by recipient countries more often than not, seem to be the main attraction among professionals who seek for a better life. Our accountants emigrate to seek for better environment and to improve their standards of living overseas; to ultimately become more cultured individuals. Respondents will be asked to answer these questions using a 5-Likert scale:

- a. Higher salary and benefits are important to me
- b. I am contented with my salary and benefits in Malaysia
- c. Both higher salary and benefits motivate me to work abroad

2. QWL (adopted from Huang et al, 2007)

Previous studies have demonstrated the importance of balance between family and work life but few have included Quality Work Life and job related attitudes. Findings indicated that different dimensions of QWL result in distinctive effects on organizational and career commitments and turnover intention. Respondents will be asked to give their opinion on the 12 statements below using a 5-point Likert scale (1 = strongly disagree to 5=strongly agree).

- a. My current job does not interrupt my family life
- b. The overtime of my current job is reasonable
- c. The workload of my current job is reasonable
- d. My job permits me to decide on my own how to go about doing the work
- e. My job is challenging
- f. My job is creative and meaningful
- g. My supervisor instructs me how to improve my job
- h. My supervisor provides me with assistance to solve my job problems
- i. My supervisor acknowledges me when I perform well in my job
- j. I am fairly rewarded compared to similar jobs in my organization
- k. I am fairly rewarded compared to similar jobs outside my organization
- l. My organization cares about employee welfare

3. Ease of immigration procedures (adopted from Jauhar, et al, 2009)

Kapur and McHale (2006) remarked that ease of immigration procedures into foreign countries has increased a solution to the shortfall of skilled manpower in those countries. This research will get respondents to give their opinion on the statements below using a 5-point Likert scale (1 = strongly disagree to 5=strongly agree).

- a. I am discouraged to migrate by tedious procedures
- b. I am more likely to consider working abroad if procedures are easy
- c. I am more motivated to move abroad if it involves simpler processes

4. International exposure (adopted from Jauhar, et al, 2009)

International exposure is related to social norms and curiosity. Scheele (2006) articulated that norms are used as basis in evaluation or judgment of one's actions. As a consequence, individuals deem moving abroad to fulfill their personal and professional needs as well as gaining international exposure as the right thing to do because it is a norm and most people are doing the same thing. So, individuals do not want to miss out on the international exposure and comply with the norm.

Carpenter et al argued that executives with international experiences are likely to be a valuable, rare, and inimitable resource for MNCs, studies also suggest that leaders with global experience are more effective at leading MNCs than those who lack significant experience overseas.

Respondents will be asked to give their opinion on the statements below using a 5-point Likert scale (1 = strongly disagree to 5=strongly agree).

- a. I am curious of the environment & lifestyles abroad
- b. I want to work abroad to fulfill my curiosity
- c. I want to gain international exposure because my friends had

5. More promising job opportunities & more challenging job scopes (adopted from Jauhar, et al, 2009)

“Perceived job opportunities in the host country” was measured using a modified subscale of the employment opportunity index developed by Griffeth, Steel, Allen, and Bryan (2005). Expatriates will be asked to indicate how strongly they agreed with three statements regarding job opportunities in the host country using a 5-point scale (1 = strongly disagree to 5=strongly agree). A sample item is, “Given my qualifications and experience, getting a job in the host country would not be very hard at all.

- a. Job opportunities & job scopes are important in my life
- b. Malaysia provides enough opportunities & challenging jobs
- c. Better job opportunities and job scopes can lure me abroad

6. Social network

Social networks have become more and more common in social science research. However, there exists the problem of which questions are suitable for acquiring information on complete social networks. One of the difficulties social network researchers are faced with is the so-called non-response, i.e. unit as well as item non-response. Social network questions differ from ordinary survey questions in at least two ways. Firstly, social network questions often are "sensitive" (Tourangeau, Ripsand Rasinski, 2000) or "threatening" (Sudman and Bradburn, 1982) questions. These questions invade privacy and people might be afraid that their answers will be disclosed to other people. Moreover, people possessing the most sensitive information (e.g. on hindrance networks) may be the least likely to report it (Tourangeau, Smith, 1996: 276). A second difference from other survey questions concerns the burdensome nature of social network questions. These questions are rather complex and demanding to fill out.

A sample item is “Consider all work related problems you had during the past year and for which you couldn't find a solution yourself. How often have you been for advice to each of the members of your research group?

Using a Five-point scale: daily - some times a week - some times a month - sometimes a year – never.

7. Moderating Variable - Personality

An individual's personality is the unique combination of psychological characteristics that affect how a person reacts and interacts with others. Personality like attitudes, affects how and why people behave the way they do. A review of the Industrial/Organizational psychology literature suggests that the sum of all personality characteristics can be categorized in five basic trait dimensions- extraversion, conscientiousness, agreeableness, openness to experience and neuroticism. These five trait dimensions subsequently labelled as the Big Five Personality (Hough, 1992; Digman, 1997). Researchers have argued that individuals are more likely to adjust to new work environments when they have proactive personalities or engage in proactive behaviors, such as information-seeking (Grant & Ashford, 2008).

A sample item is “*I see myself as someone who.....*

“Is talkative”, “Is reserved”, “Is full of energy” using a 5-point Likert scale (1 = strongly disagree to 5=strongly agree).

8. Dependent Variable

Brain drain or intention to stay was measured by using the instrument developed by Weiss, Dawis, England, and Lofquist, (1967). The instrument measures respondents' intention to leave/stay from two dimensions: intention to leave (e.g., I always thinking of resigning the job) and intention to remain with the organization. (e.g., I have planned to remain with this organization to advance my career). Intention

to stay will be measured by reverse-coding items of intention to leave where respondents will indicate their degree of agreement on a 5-point scale ranging from (5) "strongly disagree" to (1) "strongly agree" (reverse-coded). For items measuring intention to remain, respondents will indicate their degree of agreement on a 5-point scale ranging from (1) "strongly disagree" to (5) "strongly agree" (normal coded).(adapted from Mustapha et al 2011)

BRAIN DRAIN (adapted from Weiss et al, 1967; S Cho et al, 2009). This employs the 5-Likert scale

1. I always think of resigning the job/country
2. I have planned to remain with this organization/country to advance my career. I desire and intend to remain at this company/ country
3. I am likely to leave this organization/country within the next twelve months
4. Which of the following statements most reflect your feeling about your future with this employer/organization? The response varied at five levels:
 - 1 = definitely will leave;
 - 2 = probably will leave;
 - 3 = uncertain;
 - 4 = probably will not leave and
 - 5 = definitely will not leave. This item was reverse scored, such that a high score on it means high intention to leave.

To measure turnover intentions, this study will also use an item taken from Hoppock's (1935). Job Satisfaction Measure, is identical to that used in the previous study involving internal auditors (Harrell et al., 1986) and required the individual to agree or disagree with one of seven statements on a scale ranging from "I would quit this job at once if I could" to "I would not exchange my job for any other."

References

- Abdelbaki, H. H. (2009). Estimation of the Economic Impact of Brain Drain on the Labor Expelling Country. *The International Business & Economics Research Journal*, 8(12), 53.
- Adams, W. (1968). *Brain Drain*. New York: Macmillan.
- Altbach, P.G. & Bassett, R.M. (2004, September/October). The brain trade, *Foreign Policy*, 30-31).
- Arthur Andersen (1989). *Perspectives on Education: Capabilities for Success in the Accounting Profession*
- Ashford, S.J. & Black, J.S. 1996. Proactivity during organizational entry: Antecedents, tactics, and outcomes. *Journal of Applied Psychology*, 81: 199-214.
- Ashford, S. J., Blatt, R., & VandeWalle, D. 2003. Reflections on the looking glass: A review of research on feedback-seeking behavior in organizations. *Journal of Management*, 29: 769–799.
- Asis M. M. B. (2005). Recent trends in international migration in Asia and the Pacific, *Asia-Pacific Population Journal*, 20(3), 15-38.

- Ball, D. A., McCulloch, W. H. J., Geringer, J. M., Minor, M. S., & McNett, J. M. (2008). *Labor Forces in International Business, The Challenge of Global Competition*. New York: McGraw Hill.
- Barro, R. J., & Lee, J. (1993). International comparisons of educational attainment. Paper presented at The World Bank conference, *How Do National Policies Affect Long-Run Growth?*, Washington, D.C.
- Barro, R. J., & Sala-I-Martin, X. (1995). *Economic Growth*. New York: McGraw Hill.
- Baruch, Y., Budhwar, P. S., & Khatri, N. (2007). Brain drain: Inclination to stay abroad after studies. *Journal of World Business*, 42, 99-112.
- Becker, G. (1994). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Chicago: The University of Chicago Press.
- Beine, M., Docquier, F., & Rapoport, H. (2001a). Brain drain and economic growth: Theory and evidence. *Journal of Development Economics*, 64, 275-289.
- Bhagwati, J., & Hamada, K. (1974). The brain drain and income taxation. *World Development*, 1(1), 19-42.
- Bhal, K.T. and Gulati, N., (2006). Predicting Turnover Intentions: Incorporating the Role of Organization and Work-Group Level Variables *Global Journal of Flexible Systems Management 2006, Vol. 7, Nos. 3 & 4, pp 41-50*
- Black, J.S., Stevens, G.K., 1989. The influence of spouse on expatriate adjustment and intent to stay in overseas assignments. *International Journal of Human Resource Management* 3 (3), 585-592.
- Black, J.S., Mendenhall, M., & Oddou, G. 1991. Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. *Academy of Management Review*, 16: 291-317.
- Black, J.S., Gregersen, H.B., & Mendenhall, M.E. 1992. Toward a theoretical framework of repatriation adjustment. *Journal of International Business Studies*, 23: 737-760.
- Bolino, A.V (2009). An Investigation Of Proactivity, Adjustment, and Intra-Assignment Turnover Intentions Among Expatriates
- Brzozowski, J. (2008). Brain Drain or Brain Gain? The New Economics of Brain Drain Reconsidered. Unpublished thesis, Cracow University of Economics, Poland.
- Briggs J (2000). The International Migration of Health Staff, *International Health*
- Brislin, R., Worthley, R., & Macnab, B. 2006. Cultural intelligence: understanding behaviors that serve people's goals. *Group & Organization Management*, 31(1): 40-55.
- Carpenter, M. A., Sanders, W. G., & Gregersen, H. B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of Management Journal*, 44, 493-511.

- Carr, S. C., Inkson, K., & Thorn, K. (2005). From global careers to talent flow: Reinterpreting brain drain. *Journal of World Business*, 40, 386 – 398.
- Cassarino, J. (2004). Theorising Return Migration: The conceptual approach to return migrants revisited. *International Journal on Multicultural Societies*, 6(2), 253-279.
- Central Intelligence Agency, United States of America. Malaysia. Retrieved 26 October 2010, from <https://www.cia.gov/library/publications/the-world-factbook/geos/my.html>
- Central Intelligence Agency, United States of America. Country Comparison: GDP (Purchasing Power Parity). Retrieved 26 October 2010, from <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2001rank.html>
- Chay, Y. & Aryee, S. 1999. Potential moderating influence of career growth opportunities on careerist orientation and work attitudes: evidence of the protean career era in Singapore. *Journal of Organizational Behavior*, 20: 613-623.
- Chong, A. L. (2007), Higher pay, better Life Abroad. Corruption Perceptions Index 2007 Transparency International
- Crant, M. 2000. Proactive behavior in organizations, *Journal of Management*, 26(3): 435-462.
- Creehan, S. (2001). Brain strain, *Harvard International Review*, 23(2):6-7
- Crush, J. (2002). The global raiders: Nationalism, globalization and the South African brain drain. *Journal of International Affairs*, 56:147-172
- Daily, C. M., Certo, T. & Dalton, D. R. (2000). International experience in the executive suite: The path to prosperity? *Strategic Management Journal*, 21(4), 515-523.
- De Lange, D., Agneessens, F., & Waeye, H. (2004). Asking social network questions: A quality assessment of different measures. *Metodoloski Zvezki*, 1(2), 351-378.
- Dessler, G. (2013). Human Resource Management Thirteenth Edition, Pearson, UK
- Docquier, F. (2004). Skilled Migration: The Perspective of Developing Countries/ F. Docquier, H. Rapoport. World bank, 2004, p.39
- Docquier, F., & Marfouk, A. (2006). International Migration by Education Attainment. In Caglar Ozden and Maurice Schiff (Ed.). *In international migration, remittances, and brain drain* (pp. 151-201). Washington, D.C.: World Bank and Palgrave Macmillan.
- Donna, R (2009), Smart Job Strategies to Avoid Layoffs, *Organizational Behavior and Management*, Ninth Edition, McGraw-Hill, N.Y
- Glover, H.P., Mynatt, G. and Schoroeder, R.G. (2000). “The personality, job satisfaction and turnover intentions of African-American male and female accountants: an examination of the human capital and structural/class theories”, *Critical Perspectives on Accounting*, vol. 11, pp. 173-92.
- Google. *Public data*. Retrieved 27 September 2010, from http://www.google.com/publicdata?ds=wb-wdi&met=ny_gdp_mktp_cd&idim=country:MYS&dl=en&hl=en&q=malaysian+gdp

- Gooch, L. (2010, October 2). Loss of talent thwarts Malaysia. *International Herald Tribune*.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34
- Grasmuck, S. & Pessar, P. R. (1991). *Between Two Islands, Dominican International Migration*, University of California Press.
- Hackman, J.R. & Oldham, G.R. 1976. Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16: 250-279.
- Haque, N. U., Kim, S. J. (1995) *Human capital flight: Impact of migration on income and growth*. *IMF Staff Papers*, 42(3), 577–607.
- Hodgetts, R. M., Luthans, F., & Doh, J. P. (2006). *International Management: Culture Strategy and Behavior* (6th ed.). New York: McGraw-Hill.
- Hofstede, G. (1980). *Culture's Consequences*, sage, Newbury Park, CA
- Holland, J.L. (1964), "Exploration of a theory of vocational choice, part IV: vocational images and choice". *Vocational Guidance Quarterly*, Vol. 13 No.2. pp.232-9.
- Holland, J.L. (1968), "Exploration of a theory of vocational choice, part VI: a longitudinal study using a sample of typical college students". *Journal of Applied Psychology*. Vol. 52 No. 1, Part 2, February, pp.1-37.
- Holland, J.L. (1973), "Exploration of a theory of vocational choice, part IV: vocational images and choice". *Vocational Guidance Quarterly*, Vol. 13 No.2. pp.232-9.
- Henry, L. and Mohan, G. (2003) Making homes: the Ghanaian diaspora, institutions and development, *Journal of international Development*, 15, 5, 611-22
- Hoppock, R. 1955. *Job Satisfaction*. New York, NY: Harper and Row
- Igbaria, M., Greenhaus, J.H., 1992. Determinants of MIS employees' turnover intentions: a structural equation model. *Association for Computing Machinery. Communications of the ACM* 35 (2), 34-49.
- Institute of Certified Public Accountants of Singapore. (2008, July 10). Recruiting and retaining staff is the top challenge for public accounting firms. In *ICPA Singapore Website*. Retrieved date, from <http://corp.icpas.org.sg/search.aspx>
- International Organization for Migration (2005). *World Migration*, Geneva, Switzerland: Author.
- Iredale, R., (2001). *The Migration of Professionals: Theories and Typologies*. *International Migration volume 39 (5)* Blackwell Publishers Ltd.
- Ivancevich, J.M, Konopaske. R. & Matteson, M.T., (2011), *Organizational Behavior and Management*, Ninth Edition, McGraw-Hill, N.Y

- Jarmal Singh, (2000, December), *Crime Prevention-The Singapore Approach*, 112th International Training Course Visiting Experts' Papers, Tokyo , Japan
- Jaspir, S. S. (1989). *Scientific Personnel, Research Environment, and Higher Education in Malaysia*. Philip G. Altbach (Ed.) Scientific Development and Higher Education. New York: Praeger.
- Jauhar J.& Yusoff, Y.M., (2011), Brain Drain: Propensity to Leave by Malaysian Professionals. *International Journal of Management and Technology*, 2 (2) 119-122
- Jauhar, J. Yusoff, Y.M., and Khoo, M.Y., Factors That Drive Brain Drain of Accountants in Malaysia. *Proceedings 6th International Conference on Intellectual Capital, Knowledge Management & Organisational Learning, Montreal, Canada October 2009*.
- Joyce, R. E. & Hunt, C. L. (1982). Philippine nurses and the brain drain. *Social Science Medicine*, 16(12), 1223-33.
- Kaur, A., & Metcalfe, I. (2007). Thematic introduction: Migration challenges in the Asia-Pacific Region in the twenty- first century. *International Journal on Multicultural Societies*, 9(2), 131-134.
- Kaur, A. (2007). Migration matters in the Asia-Pacific: Immigration frameworks, knowledge workers and national policies. *International Journal on Multicultural Societies*, 9(2), 135-137.
- Kapur, D., & McHale, J. (2006). Should a cosmopolitan worry about the brain drain? *Ethics & International Affairs*, 20(3), 305-323.
- Kaukab, S. (2005). Situation of migration and potential available to reverse the brain drain: Case from Pakistan. *Public Personnel Management*, 34(1), 103.
- Kazlauskiene, A. & Rinkevicius, L. (2006). Lithuanian "Brain Drain" Causes: Push Pull Factors. ISSN 1392-2785 ENGINEERING ECONOMICS, 2006 No 1 (46)
- Kim, K., Kirkman, B., & Chen, G. 2006. Cultural intelligence and international assignment effectiveness. *Academy of Management Proceedings*, C1-C6.
- Larkin, J.M (1995). Managing employee turnover is everyone's. *national Public Accountant*, 40 (9), 34-36
- Lee, R. J. (2010). Expats in Singapore Earns the Highest Income. Retrieved 23 December 2010, from <http://ezinearticles.com/?Expats-in-Singapore-Earns-the-Highest-Income&id=5562275>
- Leiman, L. (2004). Should the brain drain be plugged? *Texas International Law Journal*, 39(4), 675-695.
- Lenn, M.P., and L. Campos (Eds) (1996). Globalisation of the Professions and the Quality Imperative: Professional Accreditation, Certification, and Licensure, *Magna Publications, Madison*.
- Lindsay, L. B. (2001). Some Developmental Effects of the International Migration of the Highly Skilled, *Paper for the International Labour Organization, Geneva*.
- Lockwood, N.R., (2003). Work/life balance: Challenges and Solutions. *HR Magazine*, 48 (6) 1-11
- Loh,C.H., (2013) Interview. Manager, Northern Regional Office, MIA
- Luthans, F., & Doh, J. P. (2009). *Motivation across Cultures* (7th ed.). New York: McGraw Hill.

- Maertz, C.P., & Campion, M. A. 1998. 25 years of voluntary turnover research: a review and critique. In: CL Copper and IT Robertson, Editors, *International review of industrial and organizational psychology* 13: 49–81 Wiley, New York
- Malhotra, K. (2009). The Challenge of Converting Brain Drain into Brain Gain for Developing Countries. *10th Malaysia Plan Brain Gain Malaysia Programme Workshop*, United Nations Development Programme.
- Mano-Negrin, R. & Kirschenbaum, A. (1999). Push and pull factors in medical employees' turnover decisions: the effect of a careerist approach and organizational benefits on the decision to leave the job. *The International Journal of Human Resource Management* 10(4): 689-702.
- Markus, H.R. & Kitayama S., (1991). Culture and the Self: Implications for Cognition, Emotion and Motivation. *Psychological Review* 1991, Vol 98. No 2, pp224-53
- Meyer, J-B. (2001) 'Network approach versus brain drain: Lessons from the diaspora,' *International Migration* 39: 91-108.
- Miller, V. D., & Jablin, F. M. 1991. Information seeking during organizational entry: Influences, tactics, and a model of the process. *The Academy of Management Review*, 16: 92–120
- Morrison, E.W. 1993. Newcomer information seeking: Exploring types, modes, sources, and outcomes. *Academy of Management Journal*, 36: 557–589.
- Morrison, E.W. 2002. Information seeking within organizations. *Human Communication Research*, 28: 229–242.
- May, B.E., Lau, R.S.M. & Johnson, S.K. (1999). A longitudinal study of quality of work life and business performance. *South Dakota Business Review*, 58 (2), 3-7
- Mitchell, T. R., & Lee, T. W. (2001). The unfolding model of voluntary turnover and job embeddedness: Foundations for a comprehensive theory of attachment. *Research in Organizational Behavior*, 23, 189-246.
- Mobley, W. H, Griffeth, R. W, Hand, H. H., & Meglino, B.M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 86, 493-522.
- Mustapha. N., Ahmad, A., Uli, J., and Idris, K. (2011) Antecedents of Intention to Stay with the Mediating Effects of Work-Family Factors among Single Mothers. *European Journal of Social Sciences – Volume 22, Number 2 (2011)* 262
- New Economic Model report, 2010a, p.60
- New Straits Times. *Accountants see better deal abroad*. September 8, 2007, pg. 24. ProQuest
- Odunsi, B. A. (1996). An analysis of brain drain and its impact on manpower development in Nigeria. *Journal of Third World Studies*, 13, 193-214.

- Onn F.C. (2010). Tracing the Brain Drain Trend. *The Star Online*. Retrieved date, from <http://thestar.com.my/news/story.asp?file=2010/5/16/nation/6273783&sec=nation>
- Ostroff, C. & Kozlowski, S.W.J. 1992. Organizational socialization as a learning process: The role of information acquisition. *Personnel Psychology*, 45: 849-874.
- Ozden, C., & Schiff, M. (2006). *In International Migration, Remittances and Brain Drain*, Caglar Ozden and Maurice Schiff (Ed.), (pp. 1-18). Washington, D.C.: World Bank and Palgrave Macmillan.
- Palloni, A; Massey D. S.; Ceballos M.; Espinosa K.; Spittel M., (2001). Social Capital and International Migration: A Test Using Information on Family Networks, *The American Journal of Sociology*, Vol. 106, No. 5.
- Pengelly, R. Lord, B., & Shanaban, Y. (2008). The Accounting Brain Drain: *Second New Zealand Management Accounting Conference, 20-21 November 2008*. Auckland: College of Business and Economics, University of Canterbury.
- Polimeni, J. M., & Iorgulescu, R. I. (2008). Understanding the brain-drain from the capital district of New York state. *International Business & Economics Research Journal*, 7(7), 63-76.
- Public Transport Council, Land Transport Authority, Singapore Department of Statistics
- Raghuram, P. (1999) 'Interlinking trajectories: migration and career paths among domestic workers in Delhi, India', in Momsen, J. (ed) *Gender, Migration and Domestic Service*, Routledge: London.
- Reckers, P.M.J. (1995). "Know thy Customers". *Change in Accounting Education: A Research Bulletin*, Federation of Schools of Accountancy. pp 29-36.
- Reserve Bank of Fiji Quarterly Review. (2002). Impact of Brain Drain. 40-45.
- Robbins, S. P., & Coulter, M. (2005). *Foundations of Behavior* (8th ed.). New Jersey: Prentice Hall.
- Rose, R.C., Ramalu, S.S., Uli, J., and Kumar, N., (2010). Expatriate Performance in Overseas Assignments: The Role of Big Five Personality. *Asian Social Science*. Toronto: Sep 2010. Vol. 6, Iss. 9, p. 104-113
- Roth, P.G. & Roth, P.L., (1995). Reduce turnover with realistic job previews. *CPA Journal*, 65 (9) 68-69
- Roth, K. (1995). Managing international interdependence: CEO characteristics. *Academy of Management Journal*, 38(1). 200-232.
- S. Cho, Johanson, M.M., Guchait, P. (2009). Employees Intent to Leave: A comparison of determinants of intent to leave versus intent to stay. *International Journal of Hospitality Management* 28 (2009) 374-381.
- Scheele, Marcel. (2006). *Social norms in artefact theory: Proper functions and action theory*. 1-16
- Schermerhorn, J. R. J. (2005). *Motivation: Theory and Practice* (8th ed.). New York: John Wiley.

- 3.1 Schrover, M. van der leun J. and Quispel, C. (2007) Niches, Labour Market Segregation, Ethnicity and Gender, *Journal of Ethnic and Migration Studies*, 33 4:529-40.
- 3.2 Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, 51(1).
- Sharom, A. (1985). The Relevance of American Higher Education Model for Malaysia. In Philip G. Altbach (Ed.). *In An ASEAN-American Dialogue*, Singapore Institute of Higher Education and Development, (pp. 111-121).
- Shaw, J., Delery, J., Jenkins, G., & Gupta, N. (1998). An organization-level analysis of voluntary and involuntary turnover. *Academy of Management Journal*, 41(5), 511- 566.
- Singapore Ministry of Health website (www.moh.gov.sg)
- Steel, R.P. and Ovalie, N.K. (1984), "A review and meta-analysis of research on the relationship between behavioural intentions and employee turnover", *Journal of Applied Psychology*, Vol. 69
- Steers, R. & Mowday, R.T. (1981) Employee turnover and the post decision accommodation process. *Research in Organizational Behavior*, 3, 235-282
- Straubhaar, T. (2000). International mobility of the highly skilled: Brain gain, brain drain or brain exchange. *HWWA Discussion Paper*, (88), ISSN 1432-4458.
- Tansel, A. & Gungor, N.D. (2003). Brain Drain from turkey: survey evidence of student non-return. *Emerald Career Development International* 8/2 (2003) 52-69.
- Taylor, S.L. & Cosenza, R.M. (1998) Reducing turnover in public accounting firms: An internal marketing strategy. *Journal of Professional Services Marketing*, 17 (2), 135-147.
- Tett, R.P., Meyer, J.P., 1993. Job satisfaction, organizational commitment, turnover intention, and turnover: path analysis based on meta-analytic findings. *Personnel Psychology* 46 (2), 342-346
- The Edge. (2008, April 23). Malaysia resilient against global economic slump. *The Edge*. Retrieved 29 April 2008, from http://web.archive.org/web/20080429190542/http://www.theledgedaily.com/cms/content.jsp?id=com.tms.cms.article.Article_7a3ef830-cb73c03a-c1186f00-95cc4df1
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103: 193–210.
- Thomas, D., Stahl, G., Ravlin, E., Poelmans, S., Pekerti, A., Maznevski, M., Lazarova, M., Elron, E., Ekelund, B., Cerdin, J., Brislin, R., Aycan, A., Au, K, 2008. Cultural intelligence: Domain and assessment. *International Journal of Cross-Cultural Management* 8(2): 123-143. Webster, A., (2011). The Need for Employee Retention. *E How*, April 12, 2011.
- Van Rooyen, J. (2001). *The new great trek: The story of South Africa's white exodus*. Pretoria: Unisa Press.
- Vertovec S. (2002) Transnational networks and skilled labour migration, WTPC-02-02, available at [http://www. Transcomm.ox.ac.uk/working%20papers/WTPC-02-02%20Vertovec.pdf](http://www.Transcomm.ox.ac.uk/working%20papers/WTPC-02-02%20Vertovec.pdf)

Wanberg, C. R., & Kammeyer-Mueller, J. D. (2000). Predictors and outcomes of proactivity in the socialization process. *Journal of Applied Psychology*, 85, 373–385.

Wickramasekera, P., (2002). Asian Labour Migration: Issues and Challenges in an Era of Globalization. *International Migration Programme*. 1-53

William, C. J. & Detragiache, E. E. (1999). How extensive is the brain drain? *Finance & Development Magazine*, 36(2).

Wong, K. Y., & Chong, K. Y. (1999). Education, economic growth, and brain drain. *Journal of Economic Dynamics and Control*, 23, 699-726.

World Health Organization website (www.who.int)

World Health Report 2006

World Migration Report (2010). The Future of Migration: Building Capacities for Change, *International Organization for Migration*.

www.nationalgeographic.com/xpeditions

- [1] Author 1, Author 2, Title of paper/chapter, *Name of Journal/ Conference/ Book*, Vol x, No. x, pp. x-x, Year.
- [2] H. Poor, An Introduction to Signal Detection and Estimation. *Springer-Verlag*, New York, ch. 4, 1985.
- [3] M. Young, *The Technical Writers Handbook*. Mill Valley, CA: University Science, 1989.
- [4] J. U. Duncombe, "Infrared navigation—Part I: An assessment of feasibility (Periodical style)," *IEEE Trans. Electron Devices*, vol. ED-11, pp. 34–39, Jan. 1959.
- [5] R. W. Lucky, "Automatic equalization for digital communication," *Bell Syst. Tech. J.*, vol. 44, no. 4, pp. 547–588, Apr. 1965.
- [6] S. P. Bingulac, "On the compatibility of adaptive controllers (Published Conference Proceedings style)," in *Proc. 4th Annu. Allerton Conf. Circuits and Systems Theory*, New York, 1994, pp. 8–16.
- [7] Loh, C.H., MIA 2013