

MALAYSIAN CONSTRUCTION PROFESSIONALS: WHY ARE THEY LEAVING?

Norakmarwati Ishak¹ and Abdul Rashid Abdul Aziz

¹Faculty of Architecture, Planning and Surveying, MARA University of Technology, 32610 Perak, Malaysia

²School of Housing, Building and Planning, Universiti Sains Malaysia, 11800 Penang, Malaysia

War on global talents has been going on for decades and the international mobility of talents has been increasing and has caused tremendous downside effects to countries such as Malaysia. According to the World Bank, up until 2010 there were estimated 1 million Malaysians working abroad and thus instigated the establishment of Talent Corporation in 2011. Nevertheless, in order to effectively entice these talents in coming back, finding out who are they and the main reasons they left Malaysia in the first place are mandatory. Although there are many researches in this area, little is known with regards to Malaysia, *let alone* the talent loss among the Malaysian construction professionals. An empirical study using a quantitative survey and interviews was carried out amongst Malaysian construction professionals working abroad, in an attempt to identify their characteristics and determine the main push and pull factors. By using SPSS and Rasch model of measurement, these factors are then ranked according to their importance. Interestingly the Malay professionals left Malaysia after gaining experience thus they are older as compared to the Chinese professionals. In addition, the most important reason of leaving Malaysia is due to lower income received in Malaysia. However, surprisingly other important motivations are related to personal behaviours such as to get exposure, curiosity, to challenge one's ability and also to live and work in a better environment. Therefore the main reasons are not just about money issue, they also revolve around other aspects of life. These findings hopefully would provide some insights for policy makers and the government in identifying this group of people and understanding the reasons they are leaving and thus could come up with more effective programmes of retaining and attracting these valuable talents in overcoming the talent loss phenomenon.

Keywords: brain drain, construction professionals, push and pull factors, talent loss.

INTRODUCTION

War on global talents has been going on for decades. During the post-World War period, many talents such as doctors and scientists left Britain for the United States (Hansen, 2003). At that time the United States was undoubtedly the leader of western science and magnet for top-level European scientists and technicians (Brandt, 2004). The international mobility of talents has been increasing since and has causes tremendous downside effects on third world countries that are supplying these talents such as South Africa (Mattes and Richmond 2000). After all the money spent on educating them to become highly talented persons is lost investment when they move to the Organisation for Economic Co-operation and Development (OECD) countries

¹ akmarishak@gmail.com

instead of servicing their own country. The series of economic and political changes have great influence on the migratory flow of the highly skilled. However the immigration policy in the receiving countries was the chief reason for the increase in talent loss (Lowell, 2001). For example, some countries would grant permanent residence status and even citizenship status if the person possesses rare and highly valuable talent.

Looking at the Malaysian scenario, as early as in the nineties, a research on Malaysia talent loss was conducted and the result alarmingly reveals Malaysia has the highest talent loss of tertiary educated population (Carrington and Detragiache, 1998). A more recent study has reported that the once attractive immigration country, Malaysia starts to lose her best and talented brains to other countries in this region especially to Singapore (World Bank, 2011). In 2010, it was estimated that 1 million Malaysians are working abroad and from this figures, 30% of them have tertiary education, i.e. the highly talented or skilled people. This happened after Malaysia was placed at the fourth spot out of 59 countries for its high public expenditure on education versus Gross Domestic Product (IMD, 2010). So far in terms of global war on talents, Malaysia is already losing the battle due to the outflow of highly talented citizen to other countries. Previous research on Malaysians diaspora was carried out on respondents that involved almost 50% overseas students and 80% of Chinese ethnic (Foo, 2011). However little is known concerning Malaysian construction professionals. Therefore this research aims to identify the characteristics of the Malaysian construction professional diapora and to identify the main push and pull factors behind this phenomenon among the Malaysian construction professionals.

Push and pull factors initiating migration are present in the source as well as in the receiving regions of migrants (Lee, 1966). Unfavourable conditions in the emigration places are traditionally defined as the push factors, and the benevolent conditions the faraway places are determined as the pull factors (Krugman and Obstfeld, 1991, Sylvester 1993, Filler *et al*, 1996; Jovanovich, 1997; Tassinopoulos, Werner, 1998). Some authors (Brandi *et al*, 2003) found out that push factors are more common to unskilled mass migration, and the pulls ones are likely to affect more highly skilled migration. Salary differentials between less developed countries and more developed countries often cited as the main attractant are but an indication of the expected real productivity of the émigrés (Keely, 1986).

METHOD

Target population

The target population for this study is the Malaysian construction professionals working overseas. However the lack of official statistics on the brain drain made it difficult to select indicators and sample dimensions. A record of who have stayed behind and who have left was not available from their respective professional bodies and from the Immigration Department. In order to identify these respondents, snowball nonprobability sampling technique was used (Chua, 2006; Cresswell, 2009). At first the samples were selected among friends and personal networks. These respondents are currently working with companies other than Malaysian companies and also staying in the host countries. Then more respondents were introduced through their personal contacts and through Malaysian community associations in the host countries. This study managed to identify 127 Malaysian construction professionals based mostly in Europe, Middle East, Asia Pacific and Asian countries. The respondents came from different background ranging from quantity surveyors,

architects, engineers, technical assistants and technician. The professional status is equated with tertiary level of education. Semi-structured interviews were also conducted in getting more in-depth information in relation to the questionnaire answered earlier.

DATA COLLECTION

Questionnaire survey was administered through open source web survey software. Each of the respondents was contacted via email with the questionnaire attached. Once they agreed to participate in the study, they were allowed to answer the questionnaire already provided. To ensure that only the targeted group responded to the questionnaire, four initial screening questions were asked in the survey; 1) their highest academic qualification, 2) their occupational group, 3) their current location and 4) the origin of their company. A total of 152 responses were received but only 127 (83.6%) respondents answered affirmatively to all four screening questions. The questionnaire was adapted from brain drain studies by Inkson (2004), Hugo (2004), Sheehan (2006) and Baruch *et al* (2007).

The second stage of data collection was conducted through semi-structured interviews. Four respondents; each from Australia, The Netherland, Singapore and United Arab Emirates had agreed to be interviewed. The sessions were conducted using Skype chat and call, and ranged in length from 60 minutes to 4 hours. Questions were asked based on the questionnaire that each of the respondents had previously answered in order to probe deeper and understand a particular phenomenon (Shelden *et al*, 2010 and Cresswell, 2012).

Sample

From 127 respondents, only 24 (18.9%) were female and 103 (81.1%) male. In this study, respondents were divided into 10 groups according to their host countries as displayed in Table 1.

Table 1: Host countries of respondents

Host countries	Frequency	Percent	Cumulative Percent
Singapore	16	12.6	12.6
Australia	8	6.3	18.9
UK/Europe	21	16.5	35.4
Saudi Arabia	4	3.1	38.6
UAE	18	14.2	52.8
Bahrain	5	3.9	56.7
Qatar	41	32.3	89.0
China	6	4.7	93.7
Thailand/New Zealand/ Columbia/Brunei/India	8	6.3	100.0
Total	127	100.0	

There were 13 countries involved and surprisingly Qatar provided the most numerous feedbacks even though World Bank (2011) reported that many Malaysians were in Singapore. Meanwhile United Kingdom came in second, followed by United Arab

Emirates. Singapore however came in fourth. In addition there was also one respondent from Columbia and India respectively.

With regards to the ethnic of the respondents (refer Table 2) Malay and Chinese were almost equivalent in number but the Indians and other races form a minority group.

Table 2: Ethnicity of respondents

Host countries	Frequency	Percent
Malay	64	50.4
Chinese	53	41.7
Indian	4	3.1
Others	6	4.7
Total	127	100.0

This proportion however cannot be related to the population of Malaysia citizen whereas at 2010 50% were Malays as opposed to 22.6% who were Chinese (Department of Statistics Malaysia, 2011). However the Chinese respondents made up more than 40% in this survey. Even though strong attempts had been put to get more respondents with architectural and civil engineering background, almost 60% of the respondents were from quantity surveying background and the second biggest group was from the mechanical and electrical background.

The age of the respondents ranged from 24 years old to 62 years old with 37 years old as the median age. Further analysis on the race of respondents shows that the majority of Malay respondents were between 35 to 50 years old while majority of Chinese respondents were between 26 to 40 years old. More than 80% of the respondents had acquired their bachelor degrees and almost 30% had acquired master degrees. Still there were quite a number of diploma holders among them. This is to be expected, as the sample focuses on the professionals.

Their mean salary in Malaysia was RM5280 but overseas, their mean salary was RM22,619, which is almost four times more. The majority of the respondents received incomes between RM 5,000 to RM 25,000, with the biggest group is in the RM11,000 to RM15,000 range. The maximum salary in Malaysia was RM23,000 as compared to RM65,000 in Qatar.

Analysis was carried out to identify the level of experience of the respondents. The data revealed that there were two categories of people who went abroad; the younger group who left to further study and decided to remain and the older group who left after gaining experience. The median experience was 14 years and the mean is 13.6 years (*Median*=14.0, *Mean*= 13.6). By coincidence the Chinese respondents were the majority with less experience, with 17 (32%) out of 53 from 0 to 10 years' experience in comparison to the more experience Malay respondents with 53 (82%) out of 64 with experience between 11 to 25 years of experience. Furthermore the result also indicates that the majority of the experienced Malay professionals (82%) were located in the Middle East, especially in Qatar (56%). Meanwhile the Chinese professionals concentrated in Singapore (28%) and the UK (28%).

Instrument

Initially descriptive statistics were used to describe trends or patterns in the characteristics of the respondents (Cresswell, 2009; Sekaran and Bougie, 2009; Chua, 2012). This study used the Statistical Package for the Social Sciences (SPSS) version

20.0 to analyse data that was collected from the online questionnaires. Determining the push and pull factors is vital in understanding the major reasons our Malaysian construction professionals left their country. This study adapted measures from previous studies as stated earlier. There were 23 items under 7 variables of career related, personal behaviour, national policy/regulation, children education, environment/surrounding, family related and lastly business related. The response options for all items using 5-point Likert scale were ranging from (1) strongly disagree to (5) strongly agree. As Bond and Fox mention (2007), this explicitly recognizes the scale as ordered categories only, where the value of each category is higher than of the previous one, but by an unspecified amount. That is, the data are regarded as ordinal (not interval or ratio) data. Also, the model transforms the counts of the endorsements of these ordered categories into interval scales based on the actual empirical evidence, rather than on some unfounded assumption made beforehand. Consequently, the Rasch model analysis of data from Likert-type items in opinion/attitude questionnaire is intuitively more satisfactory and mathematically more justifiable than the traditional approach of the summative method.

The seven variables are as mentioned below:

Career related variable was measured by comparing between Malaysia and overseas in terms of lacking in employment opportunities, professional development, job recognition and appreciation; lower and static salary received, working under poor environment, similar modus operandi and discrimination in the organisation.

Personal behaviour variable was measured by 4-items scale that examined individual needs such as curiosity/to seek adventure of working abroad, to get exposure of living in different country and becoming world/global citizen.

National policy/regulations was measured using 2-items scale that related to inequality in ethnic politics or policy issues and tax system. Lack of access to quality education for children was the item under children *education category*.

Next was the *environment or surrounding* category that comprising of 2-items scale; lower quality lifestyle (safety, cleanliness etc.) and support from sizeable Malaysian community overseas.

Expanding or establishing new business might be one of the reasons people went abroad and it was measured under *business related* variable

Lastly was *family related* that was measured by examining their spouse's nationality, employment, due to separation or divorce and whether to be close to family members overseas.

RESULTS

Analysis was carried out using Rasch model of measurement in order to produce linear measures with the logit unit since the data were ordinal data. Summary of the results provides high person reliability (0.86) and item reliability (0.98) with 0.86 Cronbach Alpha. Hence Table 3 shows all the variables ranked in order of logit units with the lowest logit being the easiest factor to endorse and the highest logit being the most difficult factor to endorse.

Table 3: The push and pull factors in ranked order of endorsement

Item	Total Score	Measure (logit)	Rank	Remark
Lower income	588	-1.07	1	Easiest to endorse
To get exposure	539	-0.37	2	
Curious / to seek adventure	518	-0.18	3	
To challenge ones ability	514	-0.14	4	
Static salary increment	507	-0.08	5	
Lower quality lifestyle	500	-0.03	6	
Lack job recognition	471	0.18	7	
Poor working environment	467	0.21	8	
Inequality in ethnic politics	466	0.21	9	
Becoming world/global citizen	453	0.30	10	
Lack promotion	446	0.34	11	
Stringent tax system	435	0.41	12	
Lack access to quality education	419	0.50	13	
Lack professional development	403	0.59	14	
Discrimination in organisation	401	0.60	15	
Sizeable Malaysian abroad	400	0.61	16	
Similar modus operandi	393	0.65	17	
Lack employment opportunity	360	0.83	18	
To establish/expand business	299	1.17	19	
Due to spouse's employment	258	1.42	20	
To be close to family abroad	216	1.74	21	
Married to non-Malaysian	203	1.86	22	
Due to separation/divorce	187	2.04	23	Most difficult to endorse

The result shows that *career related* variable which is received a lower income in Malaysia is the easiest to endorse factor and this is the main reason the Malaysian construction professionals left their country. As previously mentioned, the difference in salary between Malaysia and overseas is almost quadruple. Receiving higher salary is more important for older professionals because of commitment in raising their families in host or home countries. Older means more experience and in this study a large number of the respondents is in this category (*Median*=14 years). Thus it is not surprising that this factor is the easiest to endorse.

Personal behaviour such as to get exposure working overseas is in second place of the most agreeable factors. For example in the field of offshore architecture, one interviewee has opted to move to The Netherland since it is technologically more advanced and more challenging in comparison to Malaysia. International exposure is not just important to them but also to their children. As said by one of the respondent, intercultural change would broaden the children's mind, as they get to mingle with other kids with different backgrounds. Next is curiosity or to seek adventure as the reason that pushed these professionals abroad. 28% of the respondents have at least one family member or distant relatives working abroad. Stories and experiences narrated may have stirred curiosity and encouraged others to seek the same adventure as well. To challenge one's ability was the next most agreeable factor in deciding to become expatriates. In general, the Malaysian construction industry has been using the traditional method of construction with few mega projects launched. Therefore there has not been much opportunity for Malaysian professionals to be involved in cutting-edge construction. Going abroad gave them the opportunity to be involved in mega projects and at the same time to challenge their ability in handling and managing different types of construction works. 54% of respondents from the Middle East

countries have the most experience (*Mean* = 17.7 years) compared to other countries (*Mean* = 8.8 years). They were involved in construction of skyscrapers and oil and gas related construction uncommon in Malaysia.

The fifth most agreeable factor is the *static salary increment*. Salaries in Malaysia have been increasing but at the same time the costs of living has also been increasing. This means that there was little spare cash left.

Lower quality lifestyle includes bad work-life balance experienced in Malaysia had made an impact to the Malaysian construction professionals, thus it is ranked sixth. A respondent from Australia mentioned that his work-life balance was currently excellent as compared to when he was in Malaysia. Back then, he had to work even on weekends and consequently spent less time with his family. But in Australia, when it comes to family matter, his employer forced him to attend to his family first. At the office everybody respects each other's obligations to their family, a value that was hard for him to enjoy in Malaysia.

Lack of job recognition received from Malaysian employers also had some impact towards pushing these professionals away to other countries. It was not the working culture in Malaysia for employers to appreciate good work done by employees, as voiced out by one of the respondent. Simple phrases like "*thanks for your help*" or "*good job*" or "*brilliant*" is more than enough for employees to feel appreciated. During his tenure in Malaysia, he accepted that non-appreciative words were just the way the architect work.

Poor working environment is ranked 8th out of the 23 factors listed. According to one of the respondent, in Malaysia, working hours was normally from 9.00am - 6.00 pm. If the employee went home on time, the boss would have questioned, and this occurred every day. Working until 10pm at night was considered normal for the employees and most of the time they worked past midnight. There was no time in lieu system in Malaysia; no matter how late the employee worked the night before, he must be in the office at 9.00 am on the dot the next morning. However the practice is so much different overseas where any overtime needs to be justified and the employer would ask if the employee can do the given task or not.

In contrast to many reports by Malaysian mass media saying that race biased politics was the main reason Malaysian Chinese have been leaving, surprisingly *inequality in ethnic politics* is ranked 9 in terms of most agreeable factor. However the Bumiputra privilege has become a very big issue socially and politically when it comes to the quota and status given to the Bumiputra as stated in the Malaysian Constitution. The Chinese has been very vocal in supporting the meritocracy system. In this study, the Chinese respondents made up 41.7% of the sample population as compared to the Malay respondents (50.1%) and there is significant difference between answers from both ethnic groups.

As the list goes on, the factors have become more difficult to endorse and that includes family related factors. Thus to be close to family members abroad, married to non-Malaysian and due to separation or divorce are the most difficult factors to be endorsed by the respondents and it could be said that these have nothing to do with their expatriation.

CONCLUSIONS

These findings provide a new insight to the issues of talent loss or brain drain among Malaysian construction professionals. To some point it also confirms some of the

results from the previous research on Malaysian diaspora which was presented by 50% of students studying abroad (Foo, 2011), such as the most important push factors is the lower income received in Malaysia as compared to other countries such as the Middle East countries. On top of that personal behaviours are mainly the main factors these people are leaving. These professionals are encouraged to go abroad not because of the external factors but because of their own personal traits as suggested by Selmer (2010) in the study among academic expatriates. This empirical study also verifies that inequality in ethnic politics is not the most important push factor as portrayed by other researchers (Tyson, 2011) when it comes to the Malaysian construction professionals. The effect of each push and pull factors are also depends on the host country. For example, tax system is totally different from one country to the next. In UAE, there is no individual income tax imposed on the citizens and also on the expatriates. However in European countries the individual income tax imposed is even higher than Malaysia. Such variations may have affected the results of this study as about 54% of the respondents were working in the Middle East countries. Nevertheless, demographic factors such as spouse's employment, having family members abroad, married to non-Malaysian and due to separation or divorce are among the least affected factors in deciding to go overseas.

Demographically reveals that more men went abroad as compared to female. Further analyses disclose that there was some ethnic bias when it came to level of experience. Malaysia is losing valuable talents among the Malay construction professionals because they left after gaining experiences in Malaysia as compared to the Chinese professionals who left for their tertiary education and have decided to remain in the host countries and gain their experience there. The trend of the more experienced professionals who could contribute more towards the Malaysian construction industry leaving and providing their specialist elsewhere is most likely continuing. However if the Chinese professionals decided to come back eventually, much will be gained due to their training, practices and experiences that they have gained throughout the years while working overseas.

There are a few limitations of the study to prevent it from producing generalised statements. One limitation is the bias from the skewed distribution of respondents towards the Middle East countries. Another potential limitation is the bias of the occupation of the respondents towards the quantity surveying professionals. Further studies in this area should try to get a more balanced number of respondents across different countries and occupations in order to eliminate some of the weaknesses of the current study.

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