THE FACTORS THAT CAUSE BRAIN DRAIN AMONG MALAYSIAN IN WORKPLACE

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DECLARATION

We hereby declare that:

1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

3) Equal contribution has been made by each group member in completing the research project.

4) The word count of this research report is 16920 words.

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DEDICATION

We will like to dedicate to our family members and our friends who are always support us to finish the research study. Our parents give us a chance to pursuit out study in Universiti Tunku Abdul Rahman (UTAR) and also support us in terms of money and mental support.

Besides this, we would like to show our highest dedication and appreciation to our honorable supervisor, Mr Tho Mun Sin, who always guide us and motivate us to complete this research project.

Lastly, we would like to dedicate for the cooperation, understanding and respect given by the members among ourselves and also our course mates. We also would appreciate the respondents for spending their precious time to help us fill in the questionnaire in this research project.

TABLE OF CONTENT

LIST OF TABLE

LIST OF FIGURES

Page

LIST OF APPENDICES

LIST OF ABBREVIATIONS

SAS   Statistical Analysis System

PREFACE

In order to successfully complete the study of Bachelor Degree of Business Administration (Hons) in University Tunku Abdul Rahman, it is necessary for us to conduct a well research project. This research study will take for half year to complete to ensure it quality and reliability. The topic for this research study is **The Factors that Cause Brain Drain among Malaysian in Workplace.** Due to the increasing migration rate in Malaysia, it is necessary for us to understand the relationship of workforce towards the management in Malaysia and how does it affect their intention to leave in workplace. Also, this topic is compatible to the course that we pursuing which relate to the management and organizational behavior. Thus, this title is best suitable and consorts for our team.

Talent is a most valuable asset that is especially important for an organization to achieve its competitive advantage. It is important to keep on explore those workforce that is capability and reliability. However, it is not an easy task for the organization to keep those resources forever. Labors nowadays tend to have more expectation than past. Growth and recognition is the major concern for workers nowadays. They will likely to look for the job that able to bring along development and challenge for self. Whenever the job is not able to satisfy their need and expectation, they will choose to quit it. To better retain on workforces, it is important for the organization to understand their need and interest well, so that they can better capture some effective key in manage the employees.

The overall research study will provide a deep understanding on how the factors in **career development**, **job security, working environment** and **quality of life** affecting the brain drain among Malaysian in workplace. Also, some of the effective way for organization in retaining the workforce can be know too.

Abstract

The main objective of this study is to examine the factors that cause brain drain among Malaysian in workplace. A few numbers of hypotheses concerning the factors of brain drain issue that gradually increase in these recent years. The factors included career development, job security, working environment and quality of life will be discussed in this research. Therefore, previous studies that done by other researchers will be adopted in developing the hypothesis in this research project. The objective of this research study is try to identify and investigate the relationship between independent variables (career development, job security, workplace environment, quality of life) and dependent variable (brain drain)

Personal distributed questionnaire method and online questionnaire method was selected as a tool to conduct and collect samples. In addition, SAS Enterprise Guide 5.1 was used to test the data and conduct the result such as reliability test, central tendencies measurement of construct, Pearson Correlation Coefficient and multiple regression analysis. Throughout the research, the result show that a number of factors are significant related to the brain drain in Malaysia.

To conclude this research, the summary of descriptive analysis, discussion of major findings, implication of the study and the limitation of the study will be discussed in this research study. There are also has several recommendations highlighted to overcome and potential improvement area for future study.

CHAPTER 1: INTRODUCTION

1.0   Introduction

This research is try to study and understands about the reasons that cause brain drain happen among Malaysian in workplace. In the beginning of this research, we will analyses the concept of brain drain on research background and factors that cause brain drain happen in Malaysia. Next, the problem statement is to determine the factor which is independent variables that will affect the dependent variables brain drain among Malaysia. It is important to identify the correct problem statement because it will help us to better understanding the factors that affect the brain drain in Malaysia. The following step is determining the research objectives (General and Specific objective) and research questions about the brain drain in Malaysia. Then will be the hypotheses which will give us a guideline about research problems. The next topic is significance of the study, which will identify the importance of this research. Lastly, the chapter layout will briefly explain the outlines for each chapter in this research report and then followed by a conclusion for this Chapter 1.

1.1   Research Background

In 21st century, brain drain is a common trend and key phenomenon over the past decades which is happening in the worldwide as the people are seeks to find a better future and environment which is suitable for them. Based on the view of researcher, brain drain is also known as "international transfer of human capital resources and migration of highly educated individuals to developed countries (Omamegbe & Beine, 2010). In others words, it can be define as migration which professional or talented people are going or migration to others countries to gain a better future for their life. Besides that, the recent of immigration and international migration in Malaysia was dramatically increased.

Refer to the Table 1.1, it indicates the size or number of Malaysia diaspora and brain drain by country destination from the year of 1990 to 2010. During this period, the numbers of brain drain is increasing rapidly and the most popular destination that Malaysian chooses to go was Singapore. It has 276,558 which are the highest of number of Malaysia people compare with others countries in year 2010. Hence, Malaysia government have encourage and put effort attract the Malaysian talent back to local country. However, most of the Malaysian work abroad does not wish to back to their homeland.

Table 1.1: The Number Of Malaysian Of Diaspora And Brain Drain In Year Of 1990-2010 In Different Country Destination

	1990		2000		2010	
	Diaspora	Brain drain	Diaspora	Brain drain	Diaspora	Brain drain
Balanced sample total	347.403	99,306	479,064	164,884	-	276,558
Unbalanced sample total	347,403	99,306	524,613	184,121	-	-
Singapore (resident only)	185,906	19,005	286,048	66,452	350,672	121,662
Australia	44,984	35,366	56,961	38,620	-	51,556
United States	17,725	13,745	36,994	24,085	-	34,045
United Kingdom	31,130	15,328	38,147	12,898	-	16,609
Canada	12,150	8,480	17,150	12,170	-	12,807
Brunei	49,439	3,142	36,216	6,438	-	10,208
New Zealand	6,069	4,239	7,548	4,221	-	6,708
Other countries	-	-	45,549	19,130	-	22,962

Source: The World Bank (2011). Malaysia Economic Monitor: Chapter 3 Brain Drain

Furthermore, there are many Malaysian go to other countries Australia and so on rather staying at our home land work or study. They will have the perception of foreign country is better than home country because other developed countries are provided better opportunities therefore it will attract the educated people or talented people to work in oversea by offering them the job according to their respective fields. This may be occur as it will consider the reasons which include career or employment opportunities, workplace environment, quality of life, selective immigration policies by the developed nations and migrants' preference

to stay in others country (Omamegbe & Beine, 2010). In this research we have chosen several main factors that cause brain drain among Malaysian in workplace.

1.2   Problem statement

The brain drain in Malaysia has been growing more frequent and this issue has been attracting the government attention over the few decades. Thus, the government set to achieve the vision of 2020 and a high income nation status will be facing difficulty due to brain drain. At present, the researcher analyze showed that there are many people who holds a higher education will seeks employment oversea, there are around 305,000 accountant immigrants in 2009(Hornbill, 2011). There was actually few reason or factor that causes the change in this mass emigration, including career perspective, job security, quality of life and environment. Malaysia has made a big economic changes in the year of 1990, but the growth has been deceases in the past decade which is decline from 7.2% to just 4.6% (The World Bank, 2011). Expertise analyze this is mainly cause by brain drain, and caution that the nation could see serious economic problem if it does not take any action to do something to encourage professionals to stay in Malaysia. Other than that, the growth of the economic will also get affected in long term horizon if the issues are still going on.

Besides that, there will be a lot of difficult for higher education to reform due to the loss of human capital. In addition, it prevents the strategic educational planning that would set academic priorities and expectations and pursue every opportunity to meet those goals. (Akomas, 2006). Due to the lack of education resources, it will lead for the loss and less educative way among the students in colleges or universities. For instances, it can be look in the education field, which about the loss of experience lecturer that able to guide and coach the students in learning. Besides that, it will affect the level of education and lesser skilled or talented manpower in the country.

For those person who are educated with high level of education like master or professional, they may prefer or likely to development their career in foreign country. This is because that they try to earn a multiply of their salary with their current salary in local. They feeling themselves deserve for the reward that was same with their contribution. Other than that, some other reason may related to the higher education possessed which is less available in the labor market so they are require get a high salary. Unfortunately, the local companies are not capable to satisfy their demand on work. Thus, result for the loss of talented workforces.

Figure 1.1 Statistic Of The Most Popular Destination Of Immigrants In Malaysia

Figure 3.13. Brain drain continued to grow rapidly in Singapore and other destinations

Estimated annualized growth over 2000-2010 in skilled migrant stocks, age 25+, by destination, percent

Destination	Growth
Singapore	6.2%
New Zealand	4.7%
Brunei	4.7%
United States	3.5%
Australia	2.9%
United Kingdom	2.6%
Canada	0.5%

4.2% average
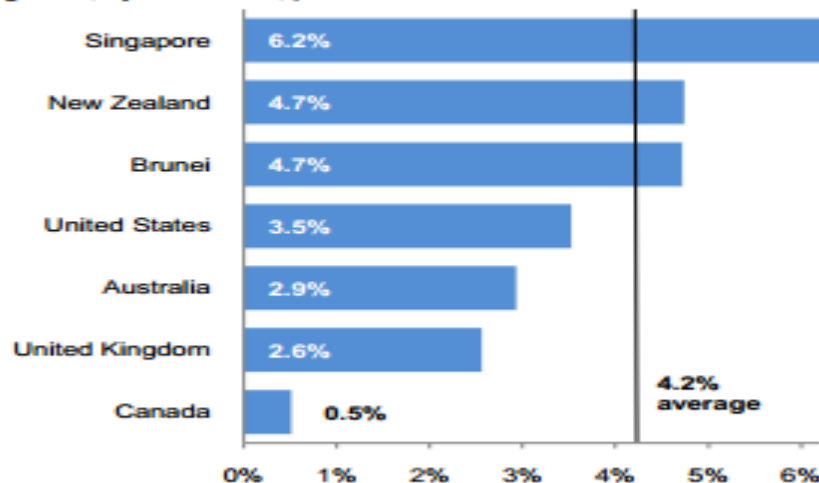
Source: World Bank staff calculations
Note: Singapore numbers for resident population only.

According to the The World Bank (2011), there was an increasing of emigrant of residents in Malaysia. It was the sample of 2000 residents that carried out in 2000-2010. Singapore was rated as the top among the other countries which stand for 6.2% in the sample. That means most of the Malaysian likely to register as Singapore residents. Next coming destination is New Zealand which accounting for 4.7% which is same for the same percentage with Brunei. The following up will be United States, Australia and United Kingdom that

stands for 3.5%, 2.9% and 2.6% accordingly. The rest of percentage is occupied by other countries. The average of grow rate of all the country will be 4.2%. Overall, it showed the rate of emigrants of residents in Malaysia do increasing frequently in the recent years. It was interpreted that the rate will be growing continuously if the factor still does not solve yet. Therefore, we are interested to conduct a research on factor that will cause brain drain in Malaysia.

1.3   Research Objective

1.3.1   General Objectives

We are aim to identify and understand the factors that cause brain drain happen in Malaysia. We also need to investigate whether there are any relationship between independent variables and dependent variables.

1.3.2   Specified Objectives

    i.   To determine whether career development will affect the brain drain.

   ii.   To determine whether job security will affect brain drain.

  iii.   To determine whether workplace environment will affect brain drain.

  iv.   To determine whether quality of life will affect brain drain.

1.4   Research Question

There are several research questions that will be asked as the following:

i.   What are factor causes the brain drain among Malaysia?
ii.   How is the relationship between job security and brain drain?
iii. How is the relationship between career development and brain drain?
iv.   How is the relationship between workplace environment and brain drain?
v.   How is the relationship between quality of life and brain drain?

1.5   Hypotheses of the Study

Hypothesis 1:

H_0: there is no significant relationship between career development and brain drain.

H_1: There is a significant relationship between career development and brain drain.

Hypothesis 2:

H_0: There is no significant relationship between job security and brain drain.

H_1: There is a significant relationship between job security and brain drain.

Hypothesis 3:

H_0: There is no significant relationship between workplace environment and brain drain.

H_1: There is a significant relationship between workplace environment and brain drain.

Hypothesis 4:

> H_0: There is no significant relationship between quality of life and brain drain.

> H_1: There is a significant relationship between quality of life and brain drain.

1.6 Significance of the Study

The important for research is to enhance the understanding and provide information about what factors that causes the brain drain in Malaysia. This will help the government to encourage the people in the country stay in Malaysia and not to migrant to others country. It will enhance the overall growth of the country education, economy, standard of living and so on. Moreover, it also brings more information to the public about the problem of brain drain. This will help the public to understand that brain drain is benefit to individual but it may cause several problems that effect in the country economic.

1.7 Chapter Layout

This project consists of 5 chapters and it structured as follows:

In chapter 1, it is the introduction of this research project. This chapter will be cover about the background and problem of the research. Meanwhile, we also addressees the research objective followed by research question. This will able to determine hypothesis and also explain the contribution and importance of this research.

Chapter 2 will be emphasizes on the literature review of relevant sources to enhance the research information. The researcher can try to get the relevant information from secondary sources. Hence, this chapter able to help the

researchers enhance understanding on the research topic in order to generate hypothesis and theoretical framework in this research project.

Chapter 3 is discuss about the way to conduct this research study by create research design, population involve in this research, sample and sampling procedures, the method to collect data, operational and what methods used to do data analysis. Other than that, the way or method of collecting information or data and target of respondents towards the research will be explained in this chapter.

The following part will be Chapter 4. It refers patterns for results and analyses of the results by using different method which will be interrelated to the research questions and hypotheses. Statistical Analysis System (SAS) is widely used to test and interpret the results. The explanation is further elaborated in details for the result.

Last part of this research will be Chapter 5.This chapter summarizes the result for research findings and explain the major findings. Other than that, this chapter will explains about limitations for this research study and it also needed to provide recommendations for future research. Lastly, it will conclude this research project in this section.

1.8   Conclusion

In conclusion, the overall of Chapter 1 will include acknowledged about background and problem statement of this research, research objectives which separated into general and specified objective, research questions will be form, hypothesis of the study, the importance of this research study and a overall view of whole research project chapter layout. All of this information will presents the readers a summary and understand about the whole study of this research. In the following chapters, it will be the study about the literature review of all factors or variables.

CHAPTER 2: LITEARTURE REVIEW

2.0   Introduction

In this chapter, the first topic of chapter 2 is review of the literature after the discussion of chapter 1. The review of literature will review about the dependent variable and independent variable from secondary sources. The next topic will review about the relevant theoretical models. After this, the researchers can form a theoretical framework that can link the dependent variable to dependent variable. The hypotheses development and conclusion will be the last two topics for this chapter.

2.1   Review of the literature

In this part, we will provide the definition and explanation for the dependent variable and independent variables.

2.1.1 Dependent Variable: Brain Drain

The brain drain is a phenomenon that skilled people leave their local country and go to other country. According to Tansel & Gungor (2003), brain drain is can be explained as migration of highly-skilled individuals from home country to others countries which will offer a better opportunities in their area. Moreover, it will help others develop countries to become better as more talented people become a citizen in their country. There are some ways that can discourage the individuals not to go oversea that can held by the government. Furthermore, people that like to live in a new environment they will choose migrant to other countries (Adam D.

Tyson, 2011). It defined brain drain as a foreign-born individual which holding academic or professional diplomas beyond high school.

According to Hugo (2011), an estimate of Malaysia' Ministry of Human Resources indicates that 350,000 Malaysian were working in foreign country. Hence, Singapore was the preference destination to migrate for Malaysian. There was more than 70 percent of the migration from Malaysia to others country stated may not return to Malaysia. Besides that, brain drain may not help the countries when the country does not provide a good opportunity of job or better life style living. Thus, Malaysia will be affected in several area such as economic or growth rate of the country.

2.1.2 Independent Variable: Career Development

Career development appears as a factor which is highly associated with the migration of workforces. Career development can be identified as an individual who was able to get for a place in the company in which they can perform well and do the goal contribution to the company (Merchant, n.d). Other than that, a respected position in a person could advance by given upward mobility and promotions. In other words, it was about what they want or need from their career. It was a lifelong process about the progression in learning and work. Nowadays, it was essential for an organization to create a workplace environment which concern for the growth and development of employee. It could bring along benefit for both organization and employee. Employees nowadays want to find the job that is potential for their growth. For instances, when an individual could fulfill their need and desire for their career, he or she will tend to become more passion on the job and maximizing the work on it. Thus, result in high satisfaction of employee towards their job and low turnover rate. These allow the employees to gain for satisfaction in a job.

According to Simonsen (as cited in Kreisman, 2002), development is one of the way that gaining new skills and opportunity and it will give benefit to employees and company. An employee can satisfied whenever they could gain for a new ability and skill on current job. It was essential for a company to assign suitable position and task by looking into a person working style and their needs. Especially for those talented workforces, they are tend to be more knowledgeable and educated than others. There was a high probability on them to leave the work if they are not able to gain for advancement on a job. They are seeking for a personal improvement. They try to find some innovation in work. Moreover, finding some challenge work that could bring along value and achievement on self. Especially the teenagers nowadays, they want to find some catalyst which enables them to upgrade their skill and personality in work.

2.1.3 Independent Variable: Job Security

According to Business Dictionary.com 2014, it defines that the job security is declaration that an employees have about the continuousness of gainful employment of their life. It happened in the term of employment contract, layoff, and employee legislation that prevents arbitrary termination. According to Rafael (n. d.), job security and feeling of insecurity itself may bring direct or indirect negative impact on the benefits and wellbeing of the employees.

Sverke, Hellgren, & Näswall, (2006) stated that the changing of nature of the work will affect the employee job security. During economy crisis, the employer may downsize the company to sustain the company therefore it will increase the employee workload and facing uncertainty of the job performance.

Age is one of the demographic factors like posing a threat of job of the employee (Sverke, Hellgren, & Näswall, 2006). The employees age who

are around 30-40 years old are likely to responsible for raising their children therefore they will have possibility to losing their jobs compare with those single. On the other hand, according to Rafael (n. d.), stated that the young worker usually facing insecure job and high turnover rate compare with older worker. According to Chi (2011), the fresh graduates are often demand for unrealistic salary and they were poor in handling the English language therefore the university graduates are unemployed

Next, according to Sverke, Hellgren, & Näswall, (2006) gender may lead to job security issue which is the man have the higher level of job insecurity than women because the man is the breadwinner of the family and it will threaten their source of income to support their family. Then, status may indicate how is the job will be affect the individual dependence on the present employment. The person who have low job status will have low income from their work therefore they unable to save money for their future use. This may due to the reason of low education level and their skills. Rafael (n. d.), stated that education able to develop their abilities to handle the difficulties in the organization.

Finally, the companies recruit and layoff the employee is based on the company needs. Normally the employment contract is tie with the employee so it may threaten the job security (Sverke, Hellgren, & Näswall, 2006). For example the part timer, they may facing job insecurity because they are the first people to leave the company once the company do not want to hire them or when the contract is going to end.

2.1.4 Independent Variable: Workplace Environment

According to Leblebici (2012), the definition of the term of "workplace" can be described as behavioral components, physical, and professional environment in which a individual was supposed to interact with a number of people. This is covering the organization of work and work activities,

employee health, well-being and balance of work-life. Chandrasekar (2011) stated that nowadays there are many managers are under mistaken the impression of the employee performance and retention which is based on the salary they received. Although it maybe is a fact for minority cases, numerous employees' surveys have shown that the statement was untrue.

In fact, the work environment has a significant impact upon brain drain issue. Work environment play an important roles for motivating health workers to perform their task. An organization's physical environment design and layout have some effect on employee behavior in the workplace (Makasa, n. d.). In a study of ASID (as cited in Chandrasekar, 2011), employees and their managers stated that physical workplace environment was an important criteria for employees sustain and stay longer in the company. Employees declared a work environment should be effective utilize the space and provide a comfortable workplace that make their work more effective and efficiency.

Work stress is derived from work environment and environmental risk in the workplace. It also means that a problematic level of environmental demand interact with the individual to change his or her psychological condition (Mikrozensus, 1999). Chandrasekar had found that the category of other job-related stress factors comprises workloads, working conditions, time pressure, and continuous contact. The number of employees experiencing and reporting that their work is overload, particularly in certain job sectors like nurse and salesperson (Avery, Tonidandel, Volpone and Raghuram, n. d.). Workplace stress has risen due to the work load increases.

Other than that, discrimination in work environment also an origin of brain drains. However, discrimination can be categories into gender discrimination, aging discrimination, and race discrimination and so on. (Zeher, 2011; Tishman, Looy and Bruyere, 2012). They also revealed some of the negative perceptions that held by managers about "the mature

worker' such as do not want or not able to adapt to new technology, not flexible, and increase the cost of health insurance. The traits owned by older workers such as experience, low turnover, commitment to quality were not highly valued by employers. According to Nelson (2013), many women also argued that they face disadvantages in the workplace such as received lower pay than man.

2.1.5 Independent Variable: Quality of Life

According to The Free Dictionary 2013, quality of life is the individual satisfaction (or dissatisfaction) with the cultural or intellectual conditions under which he/she lives. According to Benson & O'Reilly (as cited in Fatimah, Yusliza & Surienty 2013), lifestyle migration refer to affluent individuals regardless of age, moving to place either for short period or long period of time for some reasons with an ultimate goal of reaching a better quality of life.

Selmer & Lauring (as cited in Fatimah et al, 2013) state that one of the factors that pull the expatriate to migrate to other countries is due to lifestyle factors. The researcher also found out that expatriation was made due to improve their lifestyle from boredom with their home country.

According to The World Bank (2011), differences in quality of life will affect the decision to emigrate and decision to stay back in foreign country. Safety and security issues are consider as one of the important component of quality of life. In Malaysia, there are many kidnapping cases and robbery cases happen. Selmer & Lauring (as cited in Fatimah & Yusliza, 2013) also added that women are more concern about safety and security as compared with men.

According to DRC Migration, Globalisation & Poverty (n. d.), some quantitative studies found out that many households migrate to other foreign country due to have a better quality of education for their children.

2.2 Review of Theoretical Models

According to the research study, the pull and push factors will influence Malaysian to leave their current job and go to foreign country to find the job. Figure 2.1 and Figure 2.2 will show the model for push and pull framework.

Figure 2.1: Conceptual Framework: Brain Drain of Doctors from Less Developed Countries
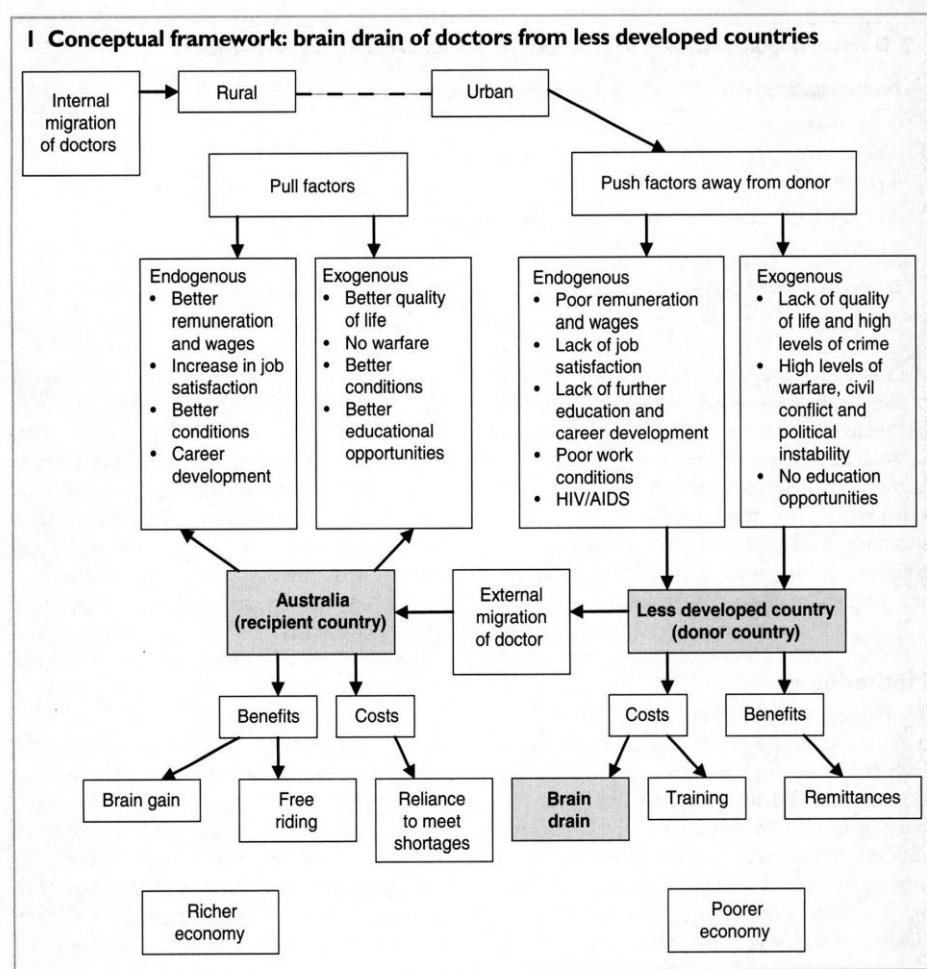
Source: Oberol, S. S. & Lin, V. (2006). Brain drain of doctors from southern Africa: brain gain for Australia. *Australian Health Review*, 30(1), 25-33.

Figure 2.2: Pull and Push Factors for Propensity to Leave by Malaysian Professionals
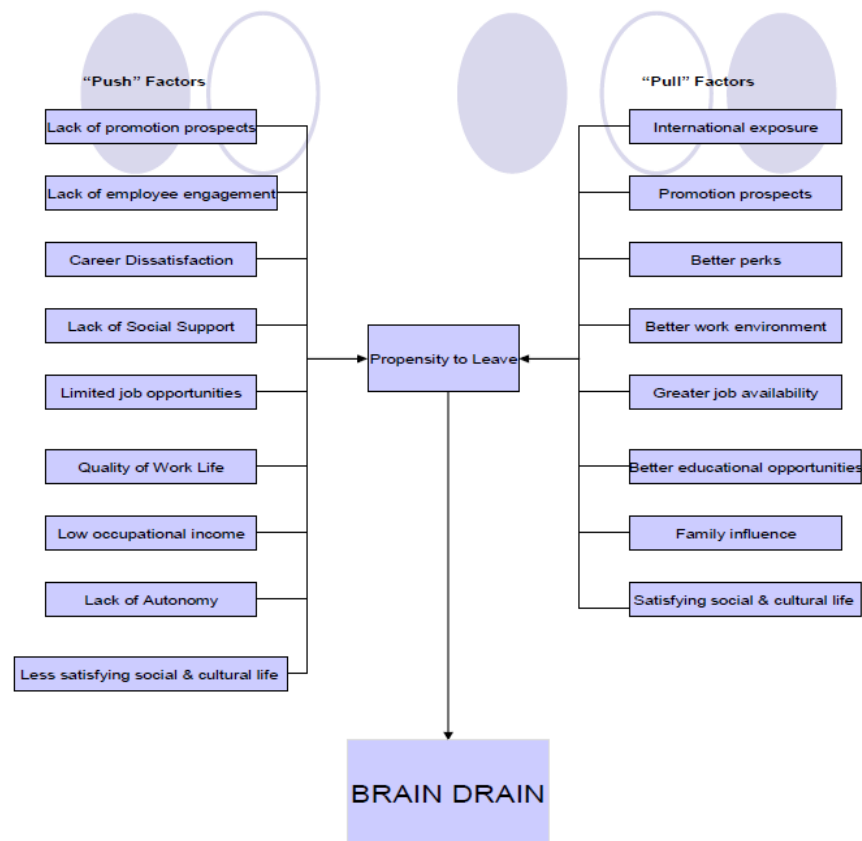
Source: Jauhar, J. &Yusoff, Y. M. (2011). Brain drain: propensity to leave by Malaysian Professionals. International Journal of Innovation, Management and Technology, 2(2), 119-112

In these two push and pull models, there are relationship between push and pull factors and brain drain. Push factors are the factors that causes people move away from their country because of the problem inside the country. Pull factors are the factors that attract people migrate to foreign country which are benefit that they can gain from that country.

According to the Figure 2.2, it had shown that career development was one of the key variables inside the pull factor. There was a recent research which shows that employee may resign their job because of this reason. According to Thomas (2000), employees required the continuous intrinsic rewards to keep their performance on the peak. Intrinsic rewards is different from the money value, it was the benefit gain from the work they do. It was about how an individual could have a feel of belongingness or meaningfulness from a job and reach their full commitment on work. According to Hall and Associates (1996), employee who having dull or unfulfilling job are less willing to remain within the work for the merely possibility of an eventual pension. It stated that employee may find a job that was more rewarding and they could achieve their growth and development prospect. Especially for those talented workforces, they have greater ability on self and highly demanded for a job that was similar for their need. Whenever the job content does not fulfill their need and goal, they will leave the job. In nowadays, loss of talented workforces had becoming a great impact for the company. So, in order to enhance the mobility on work, it was essential for the company to retain worker on the basic of the meaningfulness of a job.

The figure had shown that work environment was one of the key variables inside the pull factor. There have some researches revealed that employee their job because of work environment (AlBattat and Som, 2013). Commonly the work stress arises by work overload. The employees who work overloaded are more easily to get angry, make mistake in job, and high level of stress. This will lead them had intention to quit the job or migrate to seek an better job opportunity (Galinsky, Kim, & Bond, 2001). However, employees always concern about how fairly they are treated and welfare that provided by their company (Avery et al, n. d.). Comfortable and ergonomic office designs are the ways to meet the satisfaction of employees and indirectly avoid brain drain issue happens (Makasa, n.d.). Furthermore, a comfortable environment will also able to maintain the Malaysia workforce.

Figure 2.3: A Conceptual Model Of Job Insecurity, Its Antecedents,
Consequences And Moderators
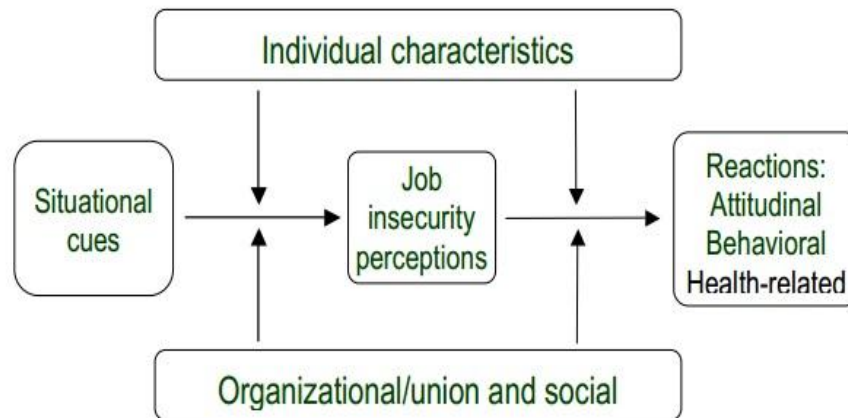
Source: Sverke, M., Hellgren, J., &Näswall, K. (2006). *Job insecurity: A literature review*. Stockholm, Sweden: National Institute for Working Life.

According to the above frameworks, job security is one of the push factors that directly give negative impact to the employee and lead them to work oversea to increase their income. If they felt insecure and dissatisfaction with their jobs, they will reduce their involvement of job in the organization or they may tent to leave the company. The employees will face physical health problem or mental problem that felt stress about losing their job. There are also has the evidence that the reaction of the job security may have negative impact for the individual family and make their family perceive the parent work stressors in their work (Lim & Loo, 2003).

Nowadays, the employee may try to look for the other job that available in other countries in order to provide high job security. Then they able to earn better income or salary that bring better prosperity to their family. According to "Chinese Brain Drain" (2013), they have the perception that working oversea able bring better reputation and quality of living to their family. Phillips (2002) suggested the better way to increase the employee job security is providing satisfy salary. The employee may feel that their work effort is worth and appreciate by the organization therefore they can get a satisfy salary. Then, satisfy salary able

encourage them to work hard and retain the potential employees who going to work oversea by providing job security and increase their loyalty to the company. The organization should provide on the job training to improve the abilities of the low level of educational employee. According to Brum (2007) the company should invest to their employee to increase their abilities and they will contribute back the benefits and pay off to organization in the future. This training will help to develop their skill and apply it into their job to improve their performance and their productivity therefore it can improve their job satisfaction and retain to the company.

2.3   Proposed Theoretical/ Conceptual Framework

Figure 2.4 Relationships Between Independent Variables And Dependent Variable
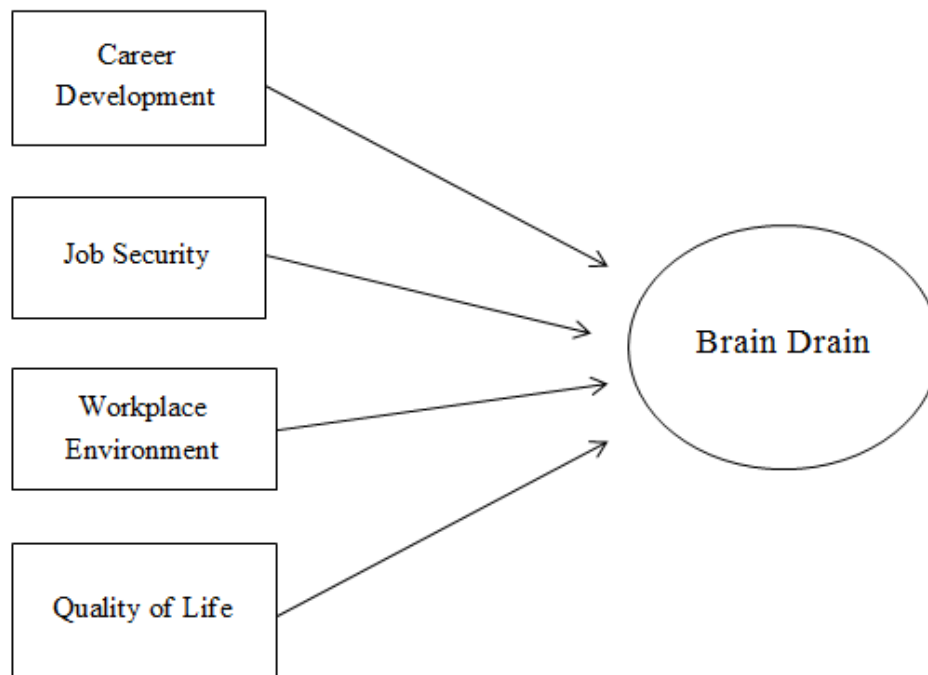
Source: Generated for research purpose

This diagram shows that the several factor that caused brain drain issue among Malaysian. Career development, job security, workplace environment and social justice will cause the brain drain in Malaysia.

According to The World Bank (2011), lack of career prospects or opportunities in professional field in Malaysia may cause Malaysian want go to foreign country to seek for better job that can suit their skill and qualification.

Based on the research result, it shows that Malaysians working abroad are more satisfied about the job security/benefit and workplace environment as compared with Malaysian working in Malaysia ("Malaysia Brain Drain Research Report", n.d.). It can show that job security and workplace environment play an important role to retain Malaysian stay in one country.

According to The World Bank (2011), people will start to choose the location before they choose the job. It is because they want to have good place to live, raise a family, work and retire. It will influence the Malaysian decision whether want to stay in home country or migrate to foreign country for a better lifestyle.

2.4   Hypotheses development

After review the relevant literatures and theoretical models, the hypotheses will be formulated and will be tested whether career development, job security, workplace environment and quality of life will have significant relationship to brain drain.

2.4.1 Career Development

Limited career prospect and career development are the key issues that causes a loss of talented workforce (Kreisman, 2002). However, an available of grow opportunities and development also become a key factor that attract an individual. Nowadays, people will be more concern on their self satisfaction on a work, example such as the knowledge and skill provided from a job. Whenever the job may provide high career prospect

for employees, then the employee will not leave the job, and vice versa. The employee could reach for self satisfaction, thus, enhance the organization performance also. There was also a responsibility of company to help achieve the goals of employees. The organization should encourage growth and create an environment that fosters this culture on it. This can be done through by implement some training program or some career counseling for the employees. Through out of this, employees can gain for new skill and knowledge. These help employees to better achieve their satisfaction on job. Organization can also clear for the needs and goal of employee. It can be better solution to retain the workforce.

H_0: There is no significant relationship between the career development and brain drain.

H_1: There is significant relationship between the career development and brain drain.

2.4.2 Job Security

Job security is mean the employee is powerless to maintain desired continuity in a threatened job situation and not only perception of unwanted job termination but also some event will be happen on the employees. According to Rafeal (n. d) job security is affected by the age, status, employment contract and gender. The change of organizational structure will reduce the job security and give effect to the psychological contract linking employer and employee (Cheng, 2004). AIBattat & Som (2012) stated that it may affect the commitment of work and lead them to be turnover to work oversea or other organization from the organization physically or mentally.

H_0: There is no significant relationship between job security and brain drain.

H_1: There is significant relationship between job security and brain drain.

2.4.3 Workplace Environment

This study revealed that is significant relationship between work environment and brain drain. He discovered that the level of motivation and performance were depends on the quality of the workplace environment (Chandrasekar, 2011). In a good environment, Makasa stated that employees can perform their task with low error rate and they can well engage with the organization, level of innovation and have a good team work with their co-workers. So, a workplace environment will influence the period that stay within the job of the workers. There are many studies showed that most of the employees leave their company due to the reason of relationship issue with their immediate supervisor or manager. Chandrasekar also discovered that other factors such as environmental factors and physical factors that may impact on employee performance. The higher the performance, the higher the job satisfaction will have. Therefore, employees may stay longer and feel belongingness to the company, and the brain drain issue can be reduced. There are many researchers found out that the workspace physical layout and efficient management processes can increase the employees' productivity and improve the organizational performance.

H_0: There is no significant relationship between workplace environment and brain drain

H_1: There is significant relationship between workplace environment and brain drain

2.4.4 Quality of Life

According to Nasir Nadeem and Dr. Muhammad Ashfag (as cited in Sajjad, n.d.), full factor that link to migration of talented Pakistani workers is better living facilities which is education, housing, etc to their family. Rehematullah (as cited in Sajjad, n.d.) state that one of the full factor that

link to Pakistan Brain Drain is suitable opportunities and environment for education of children. According to Sharma (2013), Asia's parents also want to have better quality of life for their future and also their children. One of the parents from Malaysia said that their children need to learn English in kindergarten and there is too much of stress to their children. According to Navamukundan (n.d.), the low quality of life in rural places will become the push factors for the people to move to the better environment that can get an improvement of quality of life.

H_0: There is no significant relationship between quality of life and brain drain.

H_1: There is significant relationship between quality of life and brain drain.

2.5   Conclusion

This chapter reviews some literature and other sources to identify the dependent variable which is brain drain. The other 4 independent variables are career development, job security, workplace environment and quality of life. The conceptual framework had been created and also hypotheses for each independent variables. We will create a questionnaire to do the research methodology in chapter 3.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

The objectives of this chapter are to generate the information for the problem statement is find out the evidence to support the hypotheses that have been developed in previous chapter. In this chapter, the first topic is research design, followed by data collection methods. The next topic is sampling design, which will help the researcher to have better understand of target population, sampling frame and location, sampling technique and sample size. Research instrument, constructs measurement, data processing and also data analysis will be discussed in the chapter 3.

3.1 Research Design

We use quantitative research to analyses a large number of data from the respondents. By using quantitative study, the researchers distribute the questionnaires to the respondents so that they can make the conclusion.

According to Zikmund (2010), causal research is to help the researcher to identify the cause and effect relationship for the variables. When the causes happen, it will come out the effect and this effect is the outcome of the research study. The researchers can have a better understanding about which independent variables can give effect to the dependent variable after conduct the causal research.

In this study, we can try to investigate independent variables relationship to the dependent variable. We also can try to determine whether the independent variables, which are career development, job security, workplace environment and quality of life have significant effect to the dependent variable, which is brain drain among Malaysian in the workplace.

3.2 Data Collection Methods

Data collection is one of the important aspects when conducting research. Data sources were important for the result validity. Inaccurate data may lead to undesired result.

3.2.1 Primary Data

Primary data is about the data that has not been change or alternate by other human being. In other word, it was the first hand data that been collected and not publish yet. Thus, it can be more reliable than secondary data. To ensure the result was accurate and reliable, researcher has conducted questionnaire to collect the information and data from the respondents. It was a relatively cheap and faster way to obtain large amount of information from the respondents. The questions asking will be related to the topic discuss to improve the accuracy of result.

3.2.2 Secondary Data

Secondary data is about the data that has been published in any form way. Such data can be obtained on many databases. It was included the journal and article published by the author. Such data are credible enough since there was reviewed by other specialists.

3.3 Sampling Design

Sample was defined as obtaining the information and data from a subset (Sample) of a larger group (Population). The result of the sample will be used as an estimation of the large population. Normally, it was hard for a researcher to gather

whole information from a large group of people. So, sampling method was adopted as it was easier and convenience as compare to asking question from larger group of population. However, researcher must ensure to select the right people to answer the question and minimized the error of the result.

3.3.1 Target Population

An individual must determine the target of population that will involve on the question before start the sampling design. It was the most critical part of the sampling design. First of all, researcher must make an analysis to determine who was included on the research and the person that was excluded on it. Besides that, they must select the location to start on the survey and the characteristics of people that provided the required result. On this research, the target population will be based on the employees that working on business industry in Malaysia.

3.3.2 Sampling Frame and Sampling Location

Sekaran & Boungie (2010) states that sampling frame is the list of all units in the population that can be sampled, such as the individuals, household or institution. Since there were so many business industries in Malaysia, the sample size will be too large for the researcher to gather the whole information. Other than that, some of the employees may feel reluctant to take the survey as they think that was a privacy issue. Moreover, it may be a sensitive issue for both organization and self.

To overcome the problem, we had selected the sampling location in Ipoh. The survey will be conducted at the restaurant near to the business industry. Besides that, the respondents selected must have at least two years experiences on work. We will also use the online survey to conduct our research study. We will deliver around 300 online surveys to the

respondents through Facebook and email. The respondents can use their free time to fill in the online survey.

3.3.3 Sampling Elements

The respondents selected will be included both the medium and low level management of employees such as the supervisor and employees of a department. The respondent must have at least 2 year working experience. Experienced worker tend to have more idea on their work. Thus, it can improve the reliability of the result.

However, there was some unit was excluded from the survey. Especially for those who was having direct associated for the company profit. For instances, high level management employees such as the chief executive officer and head of a department. Moreover, new recruitment was also excluded from it. They were still new and not clear for their goal yet.

3.3.4 Sampling Technique

There are two types of sampling technique which are probability sampling and non-probability sampling. In probability sampling, an individual must develop some process or procedure to ensure the units in the population having same probability or chance of being chosen.

For the non-probability sampling method, it does not cover the term in probability sampling method. The chosen units in population were unknown. Sometimes, the sample may not represent the population well, and it was hard for the researcher to determine how well they have done for it.

On this research, there will be the used of non-probability technique which is the convenience sampling method. According to Sekaran & Boungie (2010), convenience sampling was a non-probability design that it is not generalizable at all, which used to obtain the information quicker to get a 'feel' for the phenomena or variables of interest. It was a way to obtain information through the respondent that was relative ease to access for. This sampling method was the faster and easier way to conduct the survey. It can be conducted on lower cost and the respondent was readily available. For this research study, we will try to find the respondents that are voluntarily fill in questionnaire and online survey.

3.3.5 Sampling Size

According to "Labor Force Survey Report 2013" (2014), there are 13634600 labour forces in Malaysia. From this labor force size in Malaysia, we will conduct 300 surveys.

According to Saunders, Lewis and Thorhill (2009), a large quantity size of sampling is necessary because the larger of sample size that the researcher conducted, the less in error contained. It could help on provide a more reliability and accurate result.

The research study will be conduct by using personal distribute method and online survey. Each of the questions was designed based on brain drain related. A total set of 100 questionnaires were distributed by hand and 300 questionnaires were distributed to the respondents through online. All 100 questionnaires have been collected by hand but there were only 200 set of questionnaires been collected back. This may be happen due to the reason of do not have available time or lazy to fill in the online survey.

3.4 Research Instrument

The paper questionnaire will be selected to conduct the research. It will be easier for the researcher to clarify the question and instruction for the respondents. Other than that, the researcher may help on guide the respondents whenever they do not understand the question well. It may help on reduce the ambiguity of respondents too.

3.4.1 Questionnaire

According to Sekaran & Boungie (2010), questionnaire is a formulated written set of question and the respondents will record their answer, usually within rather closely defined alternatives. Actually, it can be an effective collection mechanism as the researcher could ask what is exactly they needed and how to measure the variables of interest.

There will be total of 31 questions was conducted in this questionnaire. Inside the questionnaire, there are three sections which are Part A, B and C. Each of the parts was conducted in different way. The research will be conducted with fixed alternatives question. It was about the provided of alternatives in questionnaire and the respondent are required to select one of the answer that was close to their prospect (Zikmund et al., 2010). Likert scale approach was adopted on this research. It was the most common approach to use on survey research to scaling the respond. It was conducted on ranking approaches that range from 1 to 5 which are from strongly disagree to strongly agree. The respondents are require to select one of the option that was related to their view.

Part A will be asking for the respondent individual information. There was consist of 5 questions inside which asking for the respondent basic information which are gender, age, education level, race, income level and marital status. For the Part B, it is asking about the relationship between

the 4 independent variables and brain drain. There were a total of 20 questions in this section. The question involves the four independent variables and the four independent variables are career development, job security, workplace environment and quality of life. There will be 5 questions conducted on each variable. The last section is about the dependent variable which is the loss of talented workforces. It consists of 5 questions inside. The questions focus on the impact of independent variables on the respondent satisfaction.

3.4.2 Pilot Test

The researcher will pilot a small-scale of a larger study to formulate for the study and research and this is called as pilot test (Zikmund, 2003). Pilot test was conducted to test for the reliability and efficiency of the questions in the questionnaire. The researcher will choose few respondents to conduct the pilot test. The purpose of conducting pilot test is to test whether the respondents understand the questions or not. The feedback of respondents could help the researcher to identify the error in questionnaire.

In order to ensure the result was accurate and reliable, there will be 30 set of questionnaire to conduct for the pilot testing. The pilot test will be conducted on Ipoh business industry. The result and feedback from the respondents will be collected to identify the reliability and validity of the questionnaire. We use 1 day to get back all 30 questionnaires from the respondents. It was useful for the researcher to identify the error in the questions and fix on it. So, the researcher could provide a more reliable and accurate result from this research study.

3.5 Constructs Management (Scale and Operational Definitions)

3.5.1 Original of Constructs

Table 3.1 The Origin of Constructs

Item	Modify	Author/ Resource
<u>Career Development</u> 1. I have a clear path for career development	**<u>Career Development</u>** 1. I have a clear prospect for career development in my home country's company	Tetteh et. Al.
2. My job requirements are clear.	2. Requirement on job are clear.	Tetteh et. Al
3. Greater opportunity to advance in professions.	3. My organisation provides me different opportunity to achieve my career objective or goals.	Tansel et. Al
4. Greater opportunity for further development in area of specialty.	4. My organization has show to involve and support my long term career development	Tansel et. Al
5. I feel that	5. I feel that my skills and expertise	Barzegar,

my skills and expertise are put in their best use.	are put in their best use.	M., Afzal, E., Tabibi, S. J., Delgosha ei, B.
Job Security 1. My job is secure.	**Job Security** 1. My job is secure.	Abdullah et. al
2. Workload is reasonable.	2. My workload is reasonable.	Abdullah et. Al
3. Their length of service	3. I have a long term relationship with company.	Esen
4. They are contracted employees.	4. I feel secure even though my employment contract comes to the end.	Esen
5. My salary is fair for my responsibility	5. I am satisfied with my salary.	Abdullah et.al
1. Better work environment	**Workplace Environment** 1. I feel comfortable to work in my workplace.	Tansel et. Al
2. My workplace is stressful.	2. My workplace is stressful.	Barzegar, M., Afzal, E., Tabibi, S. J., Delgosha ei, B.
3. Do you feel in any way	3. I feel discrimination in my workplace.	"General Social

discriminated against on your job because of your age?		Survey 2010"
4. I received enough resources and facilities to do my job properly.	4. I received enough resource and facilities to do my job properly.	Barzegar, M., Afzal, E., Tabibi, S. J., Delgoshaei, B.
5. Physical work conditions are good.	5. Physical work condition is good.	Abdullah et. al
Quality of life 1. How satisfied or dissatisfied are you with your local area as a place to live?	**Quality of life** 1. I am more satisfied with foreign country as a living place when compared with my local area.	Tansel et. Al
2. I feel unsecured in my living place	2. I feel more secure in foreign country when compared with Malaysia.	Tansel et. Al
3. Better educational opportunities for	3. I will leave my country if I can get better education opportunities for my children in other countries.	Tansel et. Al

children/want children to continue their education		
4. I believe that standards of living are better abroad.	4. I believe that standards of living are better abroad.	Junaimah et. al
5. Because of family related matters.	5. I am intention to move to other country because of family related matters.	Chong et. al
Brain Drain 1. Would you consider to live in another country after your school graduation?	**Brain Drain** 1. I will consider to live in another country.	"Questionnaire about Migration"
2. If a job opportunity for you is available there, will you be willing to go?	2. I will willing to go if a job opportunity is available in foreign country.	Zohry

3. A stressful working environment will cause the employee to quit from a job.	3. A stressful working environment will cause the employee to quit from a job.	Yeow et. al
4. I have family commitments that will eventually lead me back to Malaysia.	4. I have family commitments that will eventually lead me back to Malaysia.	Foo
5. I want to work abroad in the future.	5. I want to work abroad in the future.	Junaimah et al

Source: Generated for research purpose

3.5.2 Scale of measurement

3.5.2.1   Nominal Scale

Sekaran & Bougie (2010) state that the researcher can use nominal scaleto assign the subjects to some groups or categories. In a statistical view, nominal scale is the lowest measurement. There are different categories of answer provided for despondences to choose.

Figure 3.1: Example of Nominal Scale Question

```
1.  What is your gender?
    [        ] Male
    [        ] Female
```

3.5.2.2   Ordinal Scale

According to Sekaran & Bougie (2010), ordinal scale can make the rank-orders in the categories besides categories the variables in different group. An ordinal scale is next up the list in terms of power of measurement.

Figure 3.2: Example of Ordinal Scale Question

```
2.  What is your age?
    [        ] Below 25 years old
    [        ] 25 – 29 years old
    [        ] 30 – 34 years old
    [        ] 35 – 39 years old
    [        ] 40 – 45 years old
    [        ] 45 years old and above
```

3.5.2.3   Likert Scale

This measurement can be call interval scale and it is a standard survey rating scale. Normally the researcher will use a range of rating scale to get the respond from the respondent. For example: 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly agree.

Table 3.2 Sample of Question

Career Development					
6. I have a clear path for career development in my home country's company.	1	2	3	4	5
7. Requirement on job are clear.	1	2	3	4	5

3.6   Data Processing

3.6.1 Checking

The researcher will start to do the checking questionnaire whether it have inconsistency or invalid questionnaire after received 30 set of questionnaires from the target respondents. The researcher able to find out the problems and take corrective actions to the questionnaires before a real survey was completed. This allows the researchers reduce the mistake and error that will made respondents misunderstand the questions.

3.6.2 Editing

The research had to do the data checking and adjust those illogical responses, illegal codes, omission or consistency. Omission happened due to the reasons of some questions had not been answer completely by the respondents because they do not want to answer the question or not understand the question. The researcher can help the respondents to fill up their answer if there are few questions that had not been answer.

3.6.3 Coding

This process is to add value base on the respondent questionnaires. Researcher will assign unique number to represent each alternative for respondents to answer in different questionnaires. The computer will analyze the data and to generate useful result for researcher.

For the Part A of the questionnaire, the questions are about the respondents' demographic information. In question 1, we code "1=male, 2=female" for gender question. For the Part B of questionnaire, the questions are about the 4 independents variables and there are total of 20 questions. We code from "1" as strongly disagree until "5" as strongly agree and then add "99" as missing data. For the Part C of the questions, the questions are about the dependent variable. Same as the Part B, we code "1=strongly disagree" until "99=missing data" in SAS system.

3.7   Data Analysis

The important of data analysis is to highlighting the information that will help us to determine the facts and figures to solve the research problem. Furthermore, we done the checking, editing, coding, transcribing for the data process then we using Statistical Analysis System (SAS) Enterprise Guide 5.1 to generate the data analysis.

3.7.1 Descriptive Analysis

Descriptive analysis is the analysis that can able to transform the data into a form so that the researchers have better understanding about the information. For the questionnaire under Part A, all the data collected are summarized according to the format below in Table 3.3.

Table 3.3: Sample of Result for Demographic Question

Question 1	Frequency	Percent	Valid Percent	Cumulative Percent
Male				
Female				

Source: generated for research purpose

Furthermore, the summary descriptive analysis Part B and Part C as follow:

Table 3.4: Sample of Summary Descriptive Analysis

	N	Mean	Standard Deviation	Minimum	Maximum
Career Development					
Job Security					
Workplace Environment					
Quality of Life					

Source: generated for research purpose

3.7.2 Scale Measurement

After finished the part of transforming the data, we use the data to generate a pilot test to test the reliability of the questionnaire for 30 respondents who involve in this test. In generally, result less than 0.6 is refer to poor,

range more than 0.70 will be acceptable for the result and above 0.8 will be consider as good result. This reliability test result is summarizing in Table 3.5.

Table 3.5: Pilot Test Result

No.	Construct	Cronbach's Coefficient Alpha	Items	Number of Respondent
1	Career Development	0.887385	5	30
2	Job Security	0.887891	5	30
3	Workplace Environment	0.881607	5	30
4	Quality of Life	0.917105	5	30
5.	Brain Drain	0.915334	5	30

Source: generated for research purpose

As the result of this pilot study, it stated all result in Cronbach's Coefficient Alpha column. It also shows that this reliability tests is a good which the range of the test is between 0.89 and 0.95. The following table shows Rules of Thumb about Cronbach's Alpha Coefficient Size:

Table 3.6: Rules of Thumb of Reliability Test

Alpha Coefficient Range	Strength of Association
Less than 0.6	Poor
0.6 to less than 0.7	Moderate
0.7 to less than 0.8	Good
0.8 to less than 0.9	Very Good
>0.9	Excellent

*If Alpha > 0.95, item should be inspected to ensure they measure different aspects of the concept.

3.7.3 Inferential Analysis

3.7.3.1 Pearson's Correlation Coefficient Analysis

The researchers can use Pearson's Correlation Coefficient analysis to investigate whether there are any relationship between one independent variable and dependent variable. In this research, the question in Part B and Part C are using this analysis to determine the relationship. We are using Likert scale to evaluate the degree of agreement in this research.

3.7.3.2 Multiple Regression Analysis

When the researchers form the relationship of independent variable and dependent variable, the researches have to perform this multiple regression analysis to test the proposed theoretical framework. This analysis is to predict and analyze the independent variable and dependent variables. This analysis is vital in providing sufficient evidence to prove the theoretical framework in Chapter 2. Therefore, the researcher can use Multiple Regression Analysis to find out the factors that cause the brain drain happen among Malaysian.

3.8 Conclusion

In this chapter, it explains the way of researcher use the research methodology to conduct in this research project. Hence, it also described how this research was carried out such as distribute questionnaire to the respondents and test the

reliability of the question. Statistical Analysis System (SAS) Enterprise Guide 5.1 was used to generate and record the data after collected back the questionnaire from the respondents.

CHAPTER 4: RESEARCH RESULT

4.0   Introduction

In the Chapter 4, the researchers will analyze the questionnaires by using the Statistical *Analysis* System (SAS) to generate the result. The results from the analysis are assessing based on the hypotheses formulated in Chapter 1.Chapter 4 will consist of four topics. The first topic is descriptive analysis, followed by scale measurement, inferential analysis and the last topic is conclusion.

The descriptive analysis will include the demographic profile and also the central tendencies measurement. The researcher will use the scale measurement to measure the reliability statements for each variable in the surveys. For the inferential analysis, the researchers will use the Pearson Correlation Coefficient to investigate the relationship for one independent variable and dependent variable. The researchers will also use the Multiple Regression Analysis to investigate relationship of few independent variables and dependent variable.

4.1   Descriptive Analysis

4.1.1 Respondents' Demographic Profile

4.1.1.1 Gender

Table 4.1: Descriptive analysis for gender

Gender	Frequency	Percentage (%)	Cumulative Percentage (%)
Male	186	62	62
Female	114	38	100
Total	300	100	

Source: Generated for the research purpose

Figure 4.1: Gender
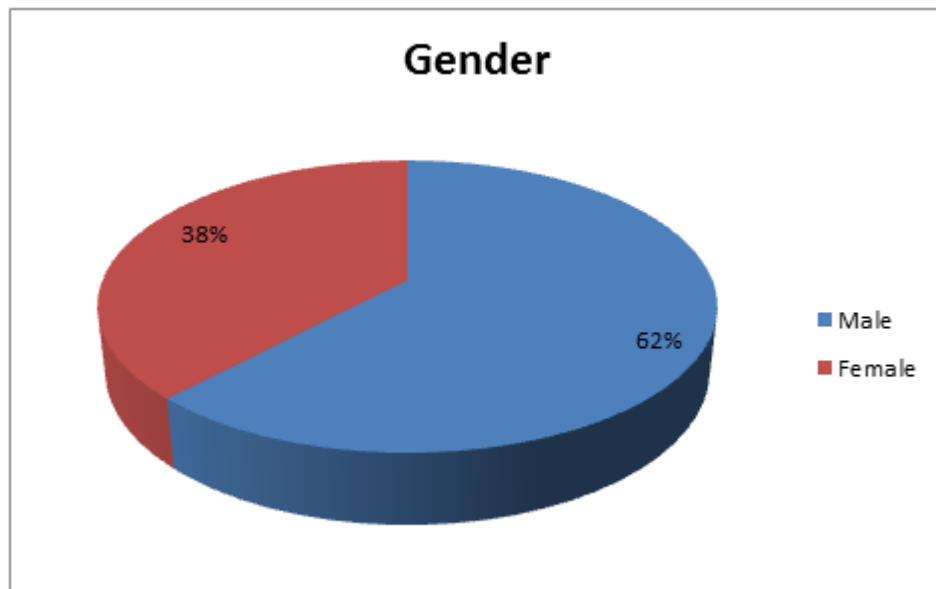
Source: Generated for the research purpose

Table 4.1 and Figure 4.1 disclose the different in gender that had participated in our study. Based on the table and pie chart above, the total number of 300 respondents, 186 (62%) were male and 114 (38%) were female.

4.1.1.2 Age

Table 4.2: Descriptive Analysis For Age

Age (Years)	Frequency	Percentage (%)	Cumulative Percentage (%)
Below 25	135	45.00	45.00
25-29	84	28.00	73.00
30-34	55	18.33	91.33
35-39	16	5.33	96.97
40-45	7	2.33	99.00
45 and above	3	1.00	100.00
Total	300	100	

Source: Generated for the research purpose

Figure 4.2: Age
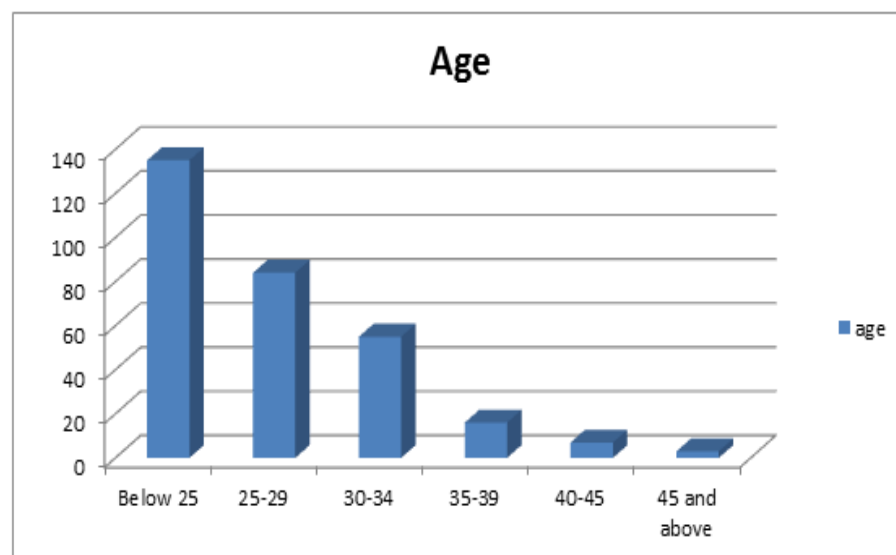
Source: Generated for the research purpose

Based on the Table 4.2 and Figure 4.2, it discloses the range of age group of the respondents. The range of age with the highest percentage was below 25 years old with 135 (45%) respondents, followed by 25-29 years old with 84 (28%) respondents and age range 30-34 years old with 55 (18.33%) respondents. However, age range from 35-39 years old with 16 (5.33%) respondents. The following ages are 40-45 with 7 (2.33%) respondents and lastly 45 and above years old with 3 (1.00%) respondents.

4.1.1.3 Respondents' Education Level

Table 4.3: Descriptive Analysis For Education Level

Education level	Frequency	Percentage (%)	Cumulative Percentage (%)
SPM	26	8.67	8.67
STPM/Diploma	84	28.00	36.67
Degree	14	49.67	86.33
Master	30	10.00	96.33
PHD	4	1.33	97.67
Others	7	2.33	100
Total	300	100	

Source: Generated for the research purpose

Figure 4.3: Educational Level
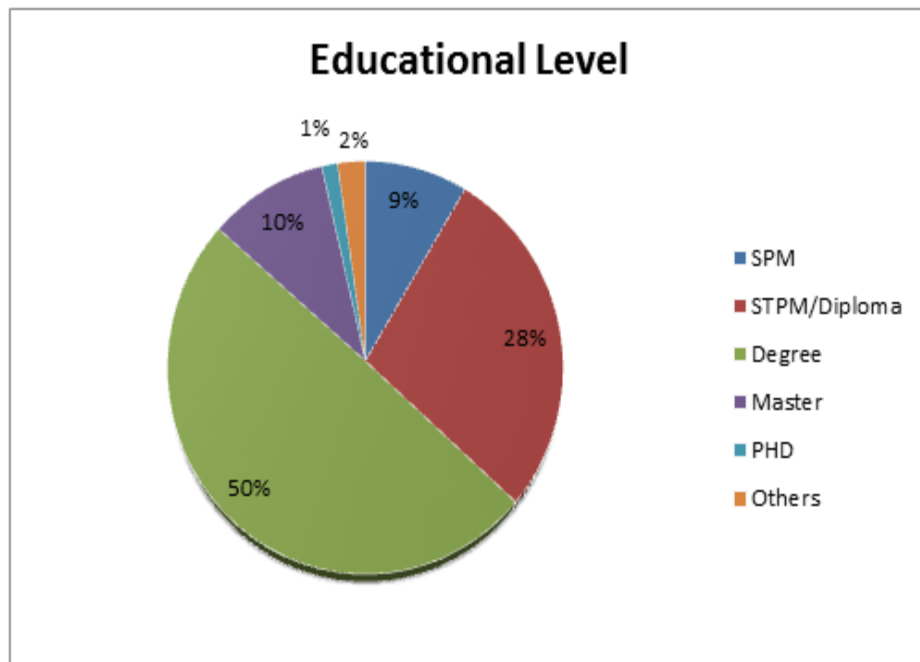
Source: Generated for the research purpose

In the Table 4.3 and Figure 4.3, it discloses the respondents' education level. Based on table and pie chart above, 149 (50%) respondents have the academic qualification of Bachelor's Degree, 84 (28%) respondents have the Diploma and 30 (10%) respondents have the Master degree. In addition, there are only 26 (8.67%) respondents that reach for secondary school (SPM) and 4 (1.33%) respondents have the PHD Holder. The remaining 7 (2.33%) is the group that are not classified in the categories mentioned above. It may be under SPM level or certain specific professional holder.

4.1.1.4 Ethnic

Table 4.4: Descriptive Analysis For Ethnic

Ethnic	Frequency	Percentage (%)	Cumulative Percentage (%)
Chinese	221	73.67	73.67
Malay	39	13.00	86.67
Indian	38	12.67	99.33
Others	2	0.67	100.00
Total	300	100	

Source: Generated for the research purpose

Figure 4.4: Ethnic
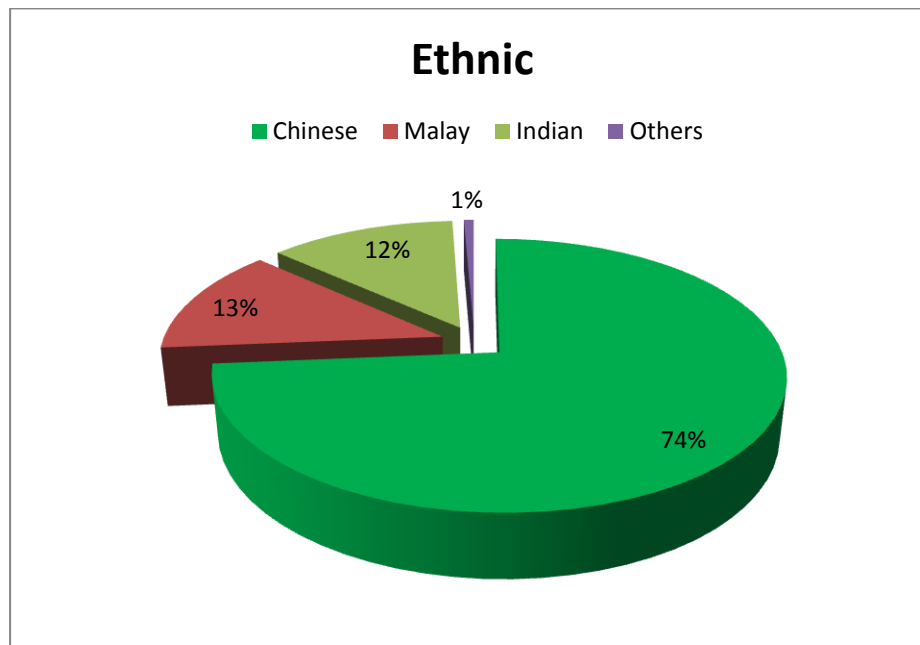
Source: Generated for the research purpose

Table 4.4 and Figure 4.4 disclose the different ethics group among respondents. From the diagram above, Chinese race consists of the largest

group from the ethnic of respondents who had participated in our study which is around 73.67% (221 of people), followed by Malay at a percentage of 12.67% (39 of people). As for the number of Indian races, there are only 12.67% (38 of people) who contributed in this research. Lastly, others race consists of 0.67% (2 of people).

4.1.1.5   Respondents' Marital Status

Table 4.5: Descriptive Analysis For Marital Status

Marital Status	Frequency	Percentage (%)	Cumulative Percentage (%)
Single	226	75.33	75.33
Married	72	24.00	99.33
Others	2	0.67	100.00
Total	300	100	

Source: Generated for the research purpose

Figure 4.5: Marital Status
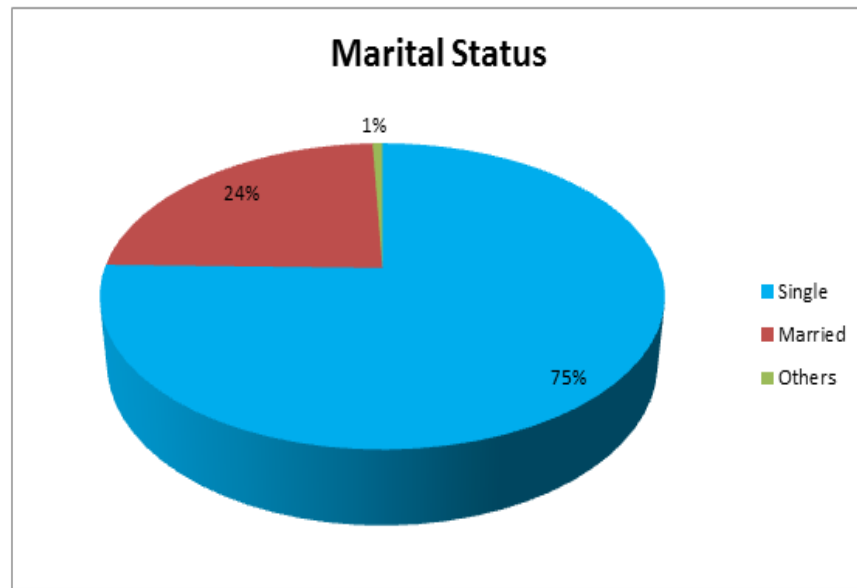
: Generated for the research purpose

Table 4.5 and Figure 4.5 disclose the respondents' marital status. Based on the table and pie chart above, 226 (75%) respondents were single, 72 (24%) respondents were still married and 2.94% (11 respondents) has categorized in "others" status. The "others" might refer to divorce status.

4.1.1.6 Income Level

Table 4.6: Descriptive analysis for Income level

Income Level	Frequency	Percentage (%)	Cumulative Percentage (%)
Less than 2000	102	34.00	34.00
RM2001-RM3000	131	43.67	77.67
RM3001-RM4000	44	14.67	92.33
RM4001-RM5000	14	4.67	97.00

RM5001 and above	9	3.00	100.00
Total	300	100	

Source: Generated for the research purpose

Figure 4.6: Income Level
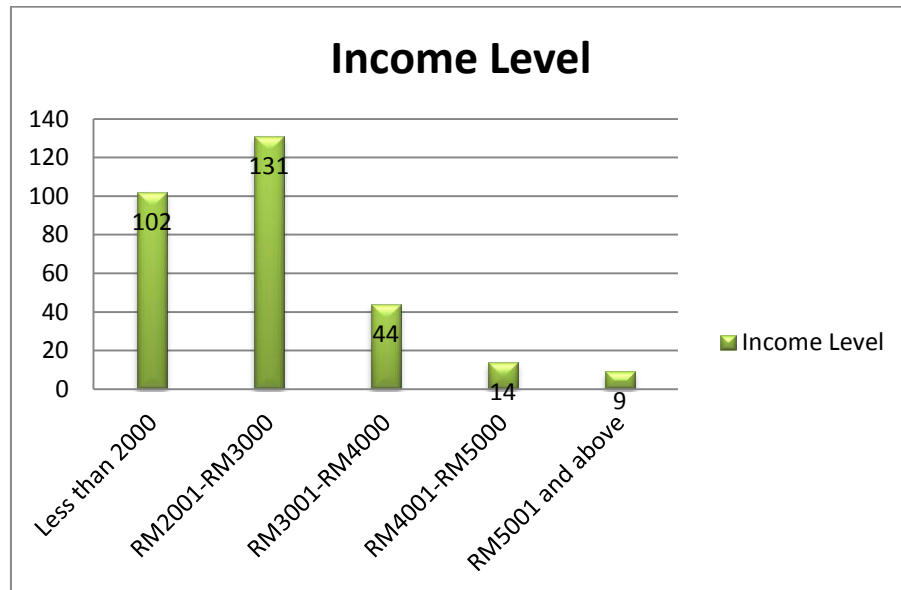
Source: Generated for the research purpose

By make reference to the Table 4.6 and Figure 4.6, 43.67% of the respondents obtained their salary at a range of RM2001 to RM3000. Next, followed by the range of less than RM2000 which is around 34.00% and RM3001-RM4000 is around 14.67%. However, the range RM4001-RM5000 has 4.67% while the lowest percentage of salary is under the category of above RM5001 which is around 3.00%.

4.1.2 Central Tendencies Measurement of Constructs

The central tendencies measurement is determined by mean score of 5 interval scaled constructs. Using 5 point interval scale, 25 items in total are

measured which are ranging from strongly disagree to strongly agree in SAS Enterprise Guide 5.1 system.

4.1.2.1 Career Development

Table 4.7: Central Tendencies Measurement of Construct of Career Development

Career Development	Percentage (%)					Mean	Rank
	SD	D	N	A	SA		
I have a clear prospect of career development in my home country's company.	42.00	44.67	3.33	5.67	4.33	1.86	2
Requirement on job are clear.	39.33	37.00	5.67	4.00	14.00	2.16	1
My organisation provides me different opportunity to achieve my career objective or goals.	71.33	16.00	0.33	5.67	6.67	1.60	5
My organization has show to	62.33	17.67	4.33	11.43	4.33	1.78	4

involve and support my long term career development							
I feel that my skills and expertise are put to their best use.	49.67	37.33	0.33	9.00	3.67	1.80	3

Source: Generated for research purpose

The Statement "Requirement on job are clear" scored the highest mean which is scored 2.16. There are 39.33% of 300 respondents are strongly disagree about this statement, 37.00% of respondents choose disagree, 5.67% of respondents choose neutral, 4.00% of respondents choose agree and only 14.00% of respondents choose strongly agree.

The last ranking statement "My organisation provides me different opportunity to achieve my career objective or goals" get the 1.60 for the mean value. 71.33% of the respondents strongly disagree with the statement, followed by 16.00% of disagree, 0.33% of neutral, 5.67% of agree and 6.67% of strongly agree.

For the other rank and mean of the statement, the mean of second rank statement "I have a clear prospect of career development in my home country's company" is 1.86; the third rank statement "I feel that my skills and expertise are put to their best use" is 1.80; and the mean of fourth rank statement "My organization has show to involve and support my long term career development" is 1.78.

4.1.2.2 Job Security

Table 4.8: Central Tendencies Measurement of Construct of Job Security

Job Security	Percentage					Mean	Rank
	SD	D	N	A	SA		
My job is secure.	52.67	36.00	1.33	6	4	1.73	4
My workload is reasonable.	51.33	35.33	3	3.33	7	1.79	3
I like to have long term relationship with my current company.	64.00	22.33	1	3.33	9.33	1.72	5
I feel secure even though my employment contract comes to the end.	43.67	31.00	3.67	15	6.67	2.10	1
I am satisfied with my salary.	41.33	46.00	0	12.33	0.33	1.84	2

Source: Generated for research purpose

Table 4.8 indicates the frequency and mean of 5 items for job security. The statement "I feel secure even though my employment contract comes to the end" ranked as the highest mean score of 2.10 compare to other statement. 43.67% of 300 respondents pick strongly disagree, 31.00% of respondents pick disagree, 3.67% of respondents pick neutral, 15% of respondents pick agree and 6.67% of respondents pick strongly agree.

The lowest ranking of statement is "I like to have long term relationship with my current company", with the mean of 1.72. 64.00% of 300 respondents are strongly disagree with the statement, 22.33% of respondents choose disagree, 1% of respondents choose neutral, 3.33% of respondents choose agree and 9.33% of respondents choose strongly agree.

For the other rank and mean of the statements, the mean of second rank statement "I am satisfied with my salary" is 1.84; the mean of third rank statement "My workload is reasonable" is 1.79; and the forth rank statement "My job is secure" scored 1.73 of the mean.

4.1.2.3 Workplace Environment

Table 4.9: Central Tendencies Measurement of Construct of Workplace Environment

Workplace Environment	Percentage					Mean	Rank
	SD	D	N	A	SA		
I feel comfortable to work in my workplace.	72.00	13.67	3.67	5.33	5.33	1.58	5
My workplace is stressful.	4.00	5.00	6.00	30.33	54.67	1.73	3

I feel discrimination in my workplace.	8.33	5.00	1.67	16.00	69.00	1.68	4
I received enough resources and facilities to do my job properly.	40.33	36.67	5.67	9.67	7.67	2.08	1
Physical work condition is good.	57.00	28.67	1.00	10.00	3.33	1.74	2

Source: Generated for research purpose

Table 4.9 discloses the mean and frequencies of 5 items for workplace environment. The highest ranking in mean is "I received enough resources and facilities to do my job properly", which is score 2.08. 40.33% of 300 respondents are choose strongly disagree in this statement, whereas 36.67% of respondent choose disagree, 5.67% of respondents choose neutral, 9.67% of respondents choose agree and 2.08% of respondent choose strongly agree.

The lowest ranking in mean is "I feel comfortable to work in my workplace", which is score 1.58. There are 72.00% of 300 respondents choose strongly disagree, 13.67% of respondents choose disagree, 3.67% choose neutral, 5.33% of respondents choose agree and also strongly agree for this statement.

For the other rank and mean of statements, the mean of second rank statement "Physical working condition is good" is 1.74; the mean of third

rank statement "My workplace is stressful" is 1.73; and the mean of forth rank statement "I feel discrimination in my workplace" is 1.68.

4.1.2.4 Quality of Life

Table 4.10: Central Tendencies Measurement of Construct of Quality of Life

Quality of Life	Percentage					Mean	Ranking
	SD	D	N	A	SA		
I am more satisfied with foreign country as a living place when compared with my local area.	4.00	8.00	1.67	39.33	47.00	4.17	1
I feel more secure in foreign country when compared with Malaysia.	4.33	3.33	5.67	67.67	19.00	3.94	3
I will leave my country if I can get better education	19.67	7.67	0	37.00	35.67	3.61	5

opportunities for my children in other countries.							
I believe that standards of living are better abroad.	6.00	14.33	0.33	41.00	38.33	3.91	4
I am intention to move to other country because of family related matters.	3.67	9.33	0.33	41.00	45.67	4.16	2

Source: Generated for research purpose

Table 4.10 shows frequency and mean of 5 items for quality of life. The highest ranking statement is "I am more satisfied with foreign country as a living place when compared with my local area", with mean of 4.17. 47.00% of respondents are choose strongly agree in this statement, whereas 39.33% of agree, 1.67% of neutral, 8.00% of disagree and 4.00% of strongly disagree.

The lowest rank of statement is "I will leave my country if I can get better education opportunities for my children in other countries", with mean of 3.61. About this statement, there are 35.67% of strongly agree, 37.00% of agree, 7.67% of disagree, and 19.67% of strongly disagree.

For the other statements, the mean of second rank statement "I am intention to move to other country because of family related matters" is 4.16; the mean of third rank statement "I feel more secure in foreign country when compared with Malaysia" is 3.94; and the forth rank statement "I believe that standards of living are better abroad" scored 3.91.

4.1.2.5 Brain Drain

Table 4.11: Central Tendencies Measurement of Construct of Brain Drain

Brain Drain	Percentage					Mean	Ranking
	SD	D	N	A	SA		
I will consider to live in another country.	4.67	6.67	1.33	49.00	38.33	4.10	3
I will willing to go if a job opportunity is available in foreign country	2.67	4.33	5.67	51.00	36.33	4.14	2
A stressful working environment will cause the employee to quit from a job.	4.67	8.00	0	41.00	46.33	4.16	1
I have family commitments	4.00	15.67	1.67	50.33	28.33	3.83	5

that will eventually lead me back to Malaysia.							
I want to work abroad in the future.	3.33	9.33	0	54.33	33.00	4.04	4

Source: Generated for research purpose

Table 4.11 indicates frequency and mean of 5 items for brain drain. The statement "A stressful working environment will cause the employee to quit from a job" scored the highest mean, which is scored 4.16. 46.33% of 300 respondents strongly agree with this statement, whereas 41.00% of respondents choose agree, 8.00% of respondents choose disagree and 4.67% choose strongly disagree.

The lowest rank of statement "I have family commitments that will eventually lead me back to Malaysia" scored 3.83 of the mean. 28.33% of respondents strongly agree towards this statement, whereas 50.33% of respondents pick agree on it, 1.67% of respondents pick neutral, 15.67% of respondents pick disagree, and 4.00% of respondents pick strongly disagree.

For the other statements, the mean of second rank statement "I will willing to go if a job opportunity is available in foreign country" is 4.14; the mean of third statement "I will consider to live in another country" is 4.10; and the mean of forth rank statement "I want to work abroad in the future" is 4.04.

4.2   <u>Scale Measurement (Reliability Analysis)</u>

Scale measurement is refer a tools that used frequently by the researchers in evaluate the scale reliability. Therefore, the most common reliability statistic used is known as the Cronbach"s Alpha which was created by Cronbach (1951). The use of Cronbach"s Alpha is to determine the average correlations and consistencies of the items when measuring the reliability of the survey instrument. In this scale measurement, this study will evaluate on the reliability analysis of one dependent variable and four independent variables. The table below shows the level of the reliability in different range of Coefficient Alpha.

Table 4.12: Rule of Thumb about Cronbach's Alpha Coefficient Size

Coefficient Alpha (α)	Reliability
0.80 to 0.95	Very Good
0.70 to 0.80	Good
0.60 to 0.70	Fair
<0.60	Poor

4.2.1 Reliability Analysis

Table: 4.13: Reliability Test for Variables

No.	Variables	Cronbach's Alpha
1	Brain Drain	0.909140
2	Quality of Life	0.830134
3	Workplace Environment	0.908634
4	Job Security	0.900201
5	Career Development	0.876294

<u>Source</u>: Generated for research purpose

Table 4.14 indicates the reliability analysis result. In the Table 4.14, it showed the dependent variable which is brain drain and independent variables which are quality of life, workplace environment, job security and career development. Among the variables, brain drain variable scored the highest value of Cronbach's alpha which is 0.90914 and it is represent a very good reliability. Workplace Environment get the Cronbach's alpha of 0.90863, followed by job security (0.90020), career development (0.87629), and lowest Cronbach's alpha is quality of life (0.83013). referring to the result, we can concluded that all the variables used in this study are acceptable and reliable because the overall reliability test is consider very good reliability as all variables have obtain more than 0.80.

4.3   Inferential Analyses

4.3.1 Pearson Correlation Coefficient

4.3.1.1 Correlation between Career Development and Brain Drain

H_0: There is no significant relationship between career development and brain drain.
H_1: There is a significant relationship between career development and brain drain.

Table 4.14: Pearson Correlations Coefficient between Career Development and Brain Drain

		Career Development	Brain Drain
Care Development	Pearson Correlation Coefficient	1.00000	-0.93374
	Sig.		<0.0001
	N	300	300
Brain Drain	Pearson Correlation Coefficient	-0.93374	1.00000
	Sig.	<0.0001	
	N	300	300

Source: Generated for research purpose

Based on the result, career development has negative relationship with brain drain due to the negative value of correlation and coefficient. Career development has a -0.93374 correlation with the brain drain. Thus, when perceive that career development is low, the brain drain is high.

The correlation coefficient value -0.93374 falls under coefficient range of ±0.91 to ±1.00. It is shows that career development has very strongly relationship with brain drain.

Career development has significant relationship with brain drain because the p-value (<0.0001) is lower than the alpha value of 0.01. Therefore, H_1 will be accepted and H_0 will not be accepted.

4.3.1.2 Correlation between Job Security and Brain Drain

H_0: There is no significant relationship between job security and brain drain.

H_1: There is a significant relationship between job security and brain drain.

Table 4.15: Pearson Correlations Coefficient between Job Security and Brain Drain

		Job Security	Brain Drain
Job Security	Pearson Correlation Coefficient	1.00000	-0.91476
	Sig.		<0.0001
	N	300	300
Brain Drain	Pearson Correlation Coefficient	-0.91476	1.00000
	Sig.	<0.0001	
	N	300	300

Source: Generated for research purpose

Based on the result, job security has negative relationship with brain drain due to the negative value of correlation and coefficient. Job security has -0.91476 correlation with the brain drain. Hence, when job security is low, brain drain is high.

The correlation coefficient value -0.93374 falls under coefficient range of ±0.91 to ±1.00. Hence, the job security has very strong relationship with brain drain.

Job security has significant relationship with brain drain because the p-value (<0.0001) is lower than the alpha value (0.01). So the H_1 will be accepted and H_0 will not be accepted.

4.3.1.3 Correlation between Workplace Environment and brain drain

H_0: There is no significant relationship between workplace environment and brain drain.

H_1: There is a significant relationship between workplace environment and brain drain.

Table 4.16: Pearson Correlations Coefficient between Workplace Environment and Brain Drain

		Workplace Environment	Brain Drain
Workplace Environment	Pearson Correlation Coefficient	1.00000	-0.91527
	Sig.		<0.0001
	N	300	300
Brain Drain	Pearson Correlation Coefficient	-0.91527	1.00000
	Sig.	<0.0001	
	N	300	300

Source: Generated for research purpose

Based on the Table 4.16, the workplace environment has negative relationship with brain drain due to negative value of correlation and coefficient. The workplace environment has a -0.91527 correlation with the brain drain. Thus, when perceive that workplace environment is low, the brain drain is high.

The correlation coefficient value -0.91527is fall under coefficient range of ±0.91 to ±1.00. It can show workplace has very strong relationship with brain drain.

Workplace environment has significant relationship with brain drain because the p-value (<0.0001) which is less than the alpha value 0.01. So the H_1 will be accepted and H_0 will not be accepted.

4.3.1.4 Correlation between Quality of Life and Brain Drain

H_0: There is no significant relationship between quality of life and brain drain.

H_1: There is a significant relationship between quality of life and brain drain.

Table 4.17: Pearson Correlations Coefficient between Quality of Life and Brain Drain

		Quality of Life	Brain Drain
Quality of Life	Pearson Correlation Coefficient	1.00000	0.89496
	Sig.		<0.0001
	N	300	300
Brain Drain	Pearson Correlation Coefficient	0.89496	1.00000
	Sig.	<0.0001	
	N	300	300

Source: Generated for research purpose

Based on the Table 4.17, the quality of life has positive relationship with brain drain due to the positive value of correlation and coefficient. The quality of life has a 0.89496 correlation with the brain drain. Thus, when quality of life in foreign country is high, the brain drain is high.

The correlation coefficient value 0.89498 is fall under coefficient range of ±0.71 to ±0.90. Therefore, the quality of life has high relationship with brain drain.

Quality of life has significant relationship with brain drain because the p-value (<0.0001) is less than the alpha value (0.01). H_1 will be accepted and H_0 will not be accepted.

4.3.2. Multiple Regressions Analysis

Table 4.18: Multiple Regressions Analysis

Analysis of Variance					
Source	**DF**	**Sun of squares**	**Mean square**	**F-Value**	**Pr>F**
Model	4	214.23870	53.55968	786.75	<.0001
Error	295	20.08276	0.06808		
Corrected Total	299	234.32147			

Root MSE	0.26092	R-square	0.9143
Dependent Mean	4.05533	Adj R-Sq	0.9131
Coefficient Variance	6.43390		

Source: Generated for research purpose

Hypothesis 5

H$_0$: The four independent variables (career development, job security, workplace environment, quality of life) are not significant in explaining the variance in brain drain.

H$_1$: The four independent variables (career development, job security, workplace environment, quality of life) are significant in explaining the variance in brain drain.

The Hypothesis 5 was supported by data. Based on the Table 4.18, it showed that p-value **(<.0001)** is lower than the alpha value (0.05). Therefore, the F-statistic is said to be significant. Overall, this model showed as a good descriptor of the relationship between the predictor and dependent variable. Hence, the four independent variables (career development, job security, workplace environment and quality of life) are significant in explaining the variance in brain drain.

Next, the R square has shown the result of the independent variables that can explain the variations in the dependent variables. In this research study, all independent variables (career development, job security, workplace environment and quality of life) are manage to explain 91.43% of the variations in dependent variable (brain drain) However, there are still leaves 8.57% are not explain in this study. It means that, there are still got other variables which may important in brain drain and have not been included in this study.

Table 4.19: Parameter Estimate

Parameter Estimate					
Variable	**DF**	**Parameter Estimate**	**Standard Error**	**t Value**	**Pr>(t)**
Intercept	1	4.09288	0.19095	21.43	<.0001
Career development	1	-0.34597	0.05162	-6.70	<.0001
Job security	1	-0,14435	0.04813	-3.00	0.0029
Workplace environment	1	-0.15449	0.04634	-3.33	0.0010
Quality of Life	1	0.28698	0.03437	8.35	<.0001

Source: Generated for research purpose

In this research study, p-value for **career development** (<.0001) is lower than the alpha value of 0.05. Therefore, we can say that, the independent variable of career development is significant to explain the dependent variable of brain drain.

In this research study, p-value for **job security** (0.0029) is lower than the alpha value of 0.05. Therefore, we can say that, the independent variable of Job security is significant to explain the dependent variable of brain drain.

In this research study, p-value for **career development** (0.0010) is lower than the alpha value of 0.05. Therefore, we can say that the independent variable of **workplace environment** is significant to explain the dependent variable of brain drain.

In this research study, p-value for **quality of life** (<.0001) is lower than the alpha value of 0.05. Therefore, we can say that, the independent variable

of **quality of life** is significant to explain the dependent variable of brain drain.

Regression equation:

Brain Drain = 4.09288 – 0.34597 (career development) – 0.14435(job security) – 0.15449 (workplace environment) + 0.28698 (quality of life)

Career development is the best predictor variable that contributes as the **highest** to the variation of the dependent variable (brain drain). It is because the value of parameter estimates which under (table 4.20) is placed on the **highest** of **0.34597** when in compared to other independent variables.

Quality of life is ranked as the **second highest** to the variation of the dependent variable (brain drain). It is because the value of parameter estimates which under (table 4.20) is placed on the **second highest** of **0.28698** when compared to the other independent variables.

Workplace environment appear as one of the predictor variable that contributes as the **third highest** to the variation of the dependent variable (brain drain). It is because the value of parameter estimates which under (table 4.20) is placed on the **third highest** of **0.15449** when compared to the other independent variables.

Job security is ranked as the lowest variable to the variation of the dependent variable (brain drain). It is because the value of parameter estimates which under (table 4.20) is placed on the **lowest** of **0.14435** when compared to the other independent variables.

Overall, **career development** has contributed as the **highest** to the variance of dependent variable. It means that most of the employees are emphasized on their satisfaction on career development. It was

recommended that the organizations should put more effort and focus on the career development of talented workface. For instance, organization can provide knowledge building and skill learning center for the employees. This could better retain them on work and reach for their satisfaction on job.

4.4   Conclusion

In this chapter 4, we adopted several types of analysis to analyses all data that collected. First, we use one way frequency to analyses the demographic profile. We also conduct central tendencies measurement of constructs to identify the frequency and the mean for each item. The researchers also conduct reliability analysis, Pearson Correlation Coefficient and Multiple Linear Regression Analysis in this chapter. We will further discuss about research result in chapter 5.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.0 Introduction

In this chapter, it can provide a more detail discussion, finding, implication and conclusion of chapter 4. The topic of chapter 5will starts with the summary of statistical analyses and then followed by discussion of major findings and implications of the study. This chapter will also provide the limitation of the study and also the recommendation for future research.

5.1 Summary of Statistical Analyses

5.1.1 Descriptive Analysis

5.1.1.1 Respondent Demographic Profile

There are 300 respondents participated in this research. Based on the demographic profile in chapter 4, 62% of respondents were male and 38% of respondents were female in the gender section.

For the age profile, the range of age with the highest percentage was below 25 years old with 45% of 300 respondents and the range with the lowest range is 45 years old and above with 1.00% of respondents.

For the education profile, 49.67% of respondents have the academic qualification of Bachelor's Degree, 28% respondents have the Diploma, 8.67% is SPM, Master is 10.00%, PHD has 1.33% and 2.33% of respondents choose others.

For the ethnic profile, most of the respondents are Chinese which contribute 73.67% of respondents, whereas Malay at a percentage of 12.67% and Indian at12.67%.

For the marital status, 75% of respondents are single, 24%of respondents are married and 2.94% of respondents has categorized in "others" status.

For the salary level, 43.67% of the respondents obtained their salary at a range of RM2001 to RM3000. Next, followed by the range of less than RM2000 which is around 34.00% and RM3001-RM4000 is around 14.67%. The range RM4001-RM5000 has 4.67% while the lowest percentage of salary is under the category of above RM5001 which is around 3.00%.

5.1.1.2 Central Tendencies Measurement of Construct

For the **career development** independent variable, the highest ranked statement for career development variable is "Requirement on job are clear", with the mean score of 2.16. The statement which has second highest mean score is "I have a clear prospect of career development in my home country's company" with the score of 1.86. The third ranked statement is "I feel that my skills and expertise are put to their best use" get the mean value of 1.80. The forth ranked statement "My organization has show to involve and support my long term career development" gets the mean value of 1.78. The last ranked statement is "My organisation provides me different opportunity to achieve my career objective or goals", with the mean score of 1.60.

For the **job security** independent variable, the statement "I feel secure even though my employment contract comes to the end" scored the highest mean of 2.10. The mean of second rank statement "I am satisfied with my salary" is 1.84; the mean of third rank statement "My workload is

reasonable" is 1.79; and the forth rank statement "My job is secure" scored 1.73 of the mean. The lowest ranking of statement is "I like to have long term relationship with my current company", with the mean of 1.72.

For the **workplace environment**, the highest ranking in mean is "I received enough resources and facilities to do my job properly", which is score 2.08. the mean of second rank statement "Physical working condition is good" is 1.74; the mean of third rank statement "My workplace is stressful" is 1.73; and the mean of forth rank statement "I feel discrimination in my workplace" is 1.68. The lowest ranking in mean is "I feel comfortable to work in my workplace", which is score 1.58.

For the **quality of li**fe, the highest ranking statement is "I am more satisfied with foreign country as a living place when compared with my local area", with mean of 4.17. , the mean of second rank statement "I am intention to move to other country because of family related matters" is 4.16; the mean of third rank statement "I feel more secure in foreign country when compared with Malaysia" is 3.94; and the forth rank statement "I believe that standards of living are better abroad" scored 3.91. The lowest rank of statement is "I will leave my country if I can get better education opportunities for my children in other countries", with mean of 3.61.

For the **brain drain**, the statement "A stressful working environment will cause the employee to quit from a job" scored the highest mean, which is scored 4.16. , the mean of second rank statement "I will willing to go if a job opportunity is available in foreign country" is 4.14; the mean of third statement "I will consider to live in another country" is 4.10; and the mean of forth rank statement "I want to work abroad in the future" is 4.04. The lowest rank of statement "I have family commitments that will eventually lead me back to Malaysia" scored 3.83 of the mean.

5.1.2 Scale Measurement

For the reliability test, Brain drain dependent variable gets the highest value for Cronbach's alpha which is 0.90914. Workplace Environment obtained a Cronbach's alpha of 0.90863, followed by job security (0.90020), career development (0.87629), and lowest Cronbach's alpha is quality of life (0.83013). From this result of reliability analysis, it can be concluded that the 4 independent variables and dependent variable used in this study are acceptable and reliable because the overall reliability test is consider very good reliability as all variables have obtain more than 0.85.

5.1.3 Inferential Analysis

5.1.3.1 Pearson's Correlation Analysis

Career development has a -0.93374 correlation with the brain drain. The job security has a -0.91476 correlation with the brain drain. The workplace environment has a -0.91527 correlation with the brain drain. The quality of life has a 0.89496 correlation with the brain drain. These figures can show that the relationship between independent variable and dependent are very strong.

Career development, job security and workplace environment show the negative relationship with brain drain whereas quality of life shows the positive relationship with brain drain. It shows that the low career development, low job security and poor workplace environment in home country's company will increase the brain drain. The better quality of life in foreign country will also increase the migration of talented workforce.

5.1.3.2 Multiple Regression Analysis

The 4 independent variables which are career development, job security, workplace environment and quality of life are significant to the dependent variance of brain drain and the hypothesis was supported by data.

Based on the Table 4.20 in chapter 4, career development is the highest contribution in brain drain, with the beta value of 0.34597. Quality of life is the second highest contribution to the brain, with the beta value of 0.28698. Workplace environment and job security makes the third and fourth contribution to the brain, which is scored 0.15449 and 0.14435 respectively to the brain drain.

Next, the R square shows that all independent variables (career development, job security, workplace environment and quality of life) are manage to explain 91.43% of the variations in dependent variable (brain drain). However, there are still leaves 8.57% that are not explain in this study. The below is the regression equation for this research study.

Regression equation:

Brain Drain = 4.09288–0.34597(Career Development)– 0.14435(Job Security)– 0.15449(Workplace Environment)+0.28698(Quality of Life)

5.2   Discussions of Major Findings

Table 5.1: Summary of Major Findings

Hypothesis	Results
H1: There is a significant relationship between career development and brain drain	Beta(β) : -0.34597 r-value : -0.93374 p-value :<0.0001
H2: There is a significant relationship between job security and brain drain.	Beta(β) : -0.14435 r-value : -0.91476 p-value : <0.0001
H3: There is a significant relationship between workplace environment and brain drain.	Beta (β) : -0.15449 r-value : -0.91527 p-value :<0.0001
H4: There is a significant relationship between quality of life and brain drain.	Beta(β) : 0.28698 r-value : 0.89496 p-value :<0.0001

Source: Generated for research purpose

The table above shows the result that used to test in Chapter 4 which contains Multiple Linear Regressions (β) and Pearson Correlations Coefficient (r-value). Hence, this will able to identify whether the independent variables have significant relationship with dependent variables. Hence, there is a significant relationship between independent variables and dependent variables.

5.2.1 Relationship between Career Development and Brain Drain

Hypothesis 1

H_0: There is no significant relationship between career development and brain drain.

H_1: There is a significant relationship between career development and brain drain.

Based on the result shown in Table 5.1, it refer the Hypothesis 1 which is examined the relationship between career development and brain drain. Based on the results, it obtains -0.93374 r-value from Pearson Correlations Coefficient while the p-value is 0.0001 which is less than the alpha value 0.01. The beta gain from Multiple Linear Regressions is -0.34597. Thus, this shown that the career development has negative and significant relationship with brain drain. It also refer that H_1 will be accepted according by this results. This will determine that career development will influence the employees' decision making to work oversea.

Based on this result, there are researchers that support this statement. According to Claussen, Grohsjean, Luger, & Probst (2014), they state that career devlopment will influence the people to go oversea when there are career opportunity available. Hence, talented workers will likely to choose a job that has high career development to enhance their future lifestyle.

5.2.2 Relationship between Job Security and Brain Drain

Hypothesis 2

H_0: There is no significant relationship between job security and brain drain.

H_1: There is a significant relationship between job security and brain drain.

According to Table 5.2, it shows the Hypothesis 2 is examined the relationship between job security and brain drain. Based on the results, it obtains -0.91476 r-value from Pearson Correlations Coefficient while the p-value is 0.0001 which is less than the alpha value 0.01. The beta gain from Multiple Linear Regressions is -0.14435. Thus, this shows that the job security has negative and significant relationship with brain drain. It also refer that H_1 will be supported by this results. As will determine that brain drain will affect employees to work oversea which they will consider job security.

Based on this research, it shows that employees will have intention to go oversea to work when they feel others country able to provide a job security for them. This may due to there have a good employee policy or agreement provided to employees. According to Ye, Cardon, & Rivera (2012), employees policy may include promised pay, promotion which can cause employees to change their location of work. Furthermore, lack of job security may influence employee's behavior, performance, and loyalty towards the organization. Besides that, job security may include downsizing, restructuring, and related forms of organizational change as it will affect the potential employees to resign or leave the local organization and switch to foreign country (Ye, Cardon, & Rivera, 2012).

5.2.3 Relationship between Workplace Environment and Brain Drain

Hypothesis 3

H_0: There is no significant relationship between workplace environment and brain drain.

H_1: There is a significant relationship between workplace environment and brain drain.

Based on the result in Table 5.2, it shows the Hypothesis 3 is examined the relationship between workplace environment and brain drain. Based on the results, it obtains -0.91527 r-value from Pearson Correlations Coefficient while the p-value is 0.0001 which is less than the alpha value 0.01. The beta gain from Multiple Linear Regressions is -0.15449. Thus, this shown that there is a negative and significant relationship between workplace environment and brain drain. It also refer that H_1 will be chosen and H_0 will be rejected by this results. This will identify that workplace environment in the country will affect the employees choice of destination to work.

In order to clarify the statement, there are few researcher has conduct a research which proven that workplace environment has relationship with brain drain. Moreover, it will able to influence the employee's workplace when employees satisfaction achieve and safety environment able to affect the performance of the employees (Sveinsdottir, Biering, & Ramel, 2006).

5.2.4 Relationship between Quality of Life and Brain Drain

Hypothesis 4

H_0: There is no significant relationship between quality of life and brain drain.

H_1: There is a significant relationship between quality of life and brain drain.

According to Table 5.2, it shows the Hypothesis 4 which examined the relationship between quality of life and brain drain. Based on the results, it obtains 0.89496 r-value from Pearson Correlations Coefficient while the p-value is 0.0001 which is less than the alpha value 0.01. The beta gain from Multiple Linear Regressions is 0.28698. Thus, this shown that quality of life has positive and significant relationship with brain drain. It also refer that H_1 will be accepted based on this results. As it will determine that quality of life obtain in oversea will affect employees to cause brain drain in Malaysia.

Qualities of life (QOL) consist of important impact toward the resident in Malaysia. According to Hitam& Borhan (2012), pollution occur may influence the health of people while quality of enviroment also effected. Besides that, pollution in a country will affect the growth of a country economic. It is because economic development will refer the standard of living whether is it a low, moderate or high income economy available in the country Hitam, M. B., & Borhan, H. B. (2012). Other than that, Malaysia is facing shortage of housing in urban area which it will effect the quality of life as the people unable to stay in urban areas (Zainal, Kaur, Ahmad, & Khalili, 2012).

5.3   Implication of the Study

5.3.1 Discussion of Study

From this research study, it shows that there is significant relationship in between career development, job security, workplace environment and quality work life to the brain drain in work place. Based on the result we conducted from reliability test, we found that three independent variables of career development, job security and workplace environment are negative related to brain drain. Whereas, there is only quality work life is positive related to it.

This research study is conducted by using personal distributed questionnaire and online survey and we found out that most of the respondents were Gen Y. Based on the respondents answer, most of them agree that **career development** is the vital factor which affecting their decision to work abroad. Inside the questionnaire, most respondents claim that their companies are not able to satisfy their need on personal development. According to Simonsen (1997), Gen Y nowadays is emphasized on their expectation from a job. For instances, they need for sense of achievement on work or any advancement on personal skill or knowledge development. This is the most important aspect which they concern and expect from a job.

The second strongest factor that affects their decision to work abroad is **quality of life** in a country. Most of the respondents stated that, they are not satisfied towards the life in Malaysia. If there are better opportunities on aboard, they will consider moving out. According to The World Bank (2011), quality of life is one of the important factors which affect their decision to work abroad. There is more for Malaysia to improve the security and safety component.

Next factor is **workplace environment** issue. A highly harmonize and motivate environment is more preferable. Also, a comfortable and utilize workplace allow them to perform more effectively. Last factor is the **job security**. Some of respondents claim that their jobs are not secured; they could not get equalities on work. Besides that, change in allowance is highly related to employees' intention to leave too. Although salary is less related for Gen Y, it stills a best way to motivate them. Companies are encouraged to concern on the well-being and benefit of employees. Whenever the job allowance could meet their perceived need, intention to leave the job is lower too (Dekel & Pauzner, 2011).

5.3.2 Implication on Current Management

The growing talent in Gen Y proves that it will become one of the important resources for Malaysia in future. However, these resources tend to flow on other countries. Throughout the research study, it has highlighted some implication and the need to retain on them. By understand the effect and change on each variables; it could help companies to determine which aspect or part needed to strengthen and emphasize on. Also, companies can have a better understanding on the expectation and need of talented workforce and find out some way to retaining the talent in workplace. Besides that, this research finding also provides an insight for the basic requirement of Gen Y in workplace. Throughout the study, it helps companies to narrow down the requirement on them and reach for effectiveness in recruitment and retaining process. This allow Companies to better attract the workforce by focus the aspect needed by them.

5.3.3 Implication on Future Management

The research finding provides an insight for students on their need in future career. Throughout the study, they can better understand their own potential and requirement on future career. Also, realize their own capability and better select an industry which suitable for them. Whenever looking for job, they will take consider on each aspect mentioned. For instance, students will tend to look for the companies that able to provide personal development and comfortable workplace environment.

Other than student perspective, this research study also aid for the other researcher as reference. It gives a direction for researcher to deal with brain drain issue. Throughout the study, researcher can better understand on which possible factors that could contribute to brain drain issue. Due to the prior knowledge, research can better explore some other spot that are not classified yet important one. This research study also acts as an information tool which saving up the time and money of future researcher. A good research study can provide an accuracy information that are worth to be examined and knowledge which are usable in real world situation.

5.4 Limitation of the Study

Limitations are significant obstacles that arise in the research which are out of researcher's control. The first potential limitation is lack of probability sampling. The sample sizes that we collected are small and the number of population in Malaysia around 30 millions of people. In this situation, if the number of sample size too small, it will be difficult to find the significant relationship from data and affect the reliability of the result.

The second limitation is about the time frame given to conduct the research project. It is time consuming for the five undergraduates students to do the research project, from setting the research title, searching the information for

related title, designing the questionnaire, distributing the questionnaire and using the SAS Enterprise Guideline 5.1 to analysis the result within 6-7 months. Thus, this short period of time had limited our range to conduct our research. However, within a short period of time given, we might be neglecting some of the useful information and stability within sample due to time constraint.

Furthermore, the third limitation is comes from respondents. We have sent 300 online surveys to the people through Facebook and we only receive 200 online surveys from the respondents. Among the respondents, around 74% of the respondents are Chinese. There may be a possibility of bias issue due to the different in race or culture. For instance, difference race have different culture and educational background thus they may not able to reach mutual consensus on their point of view.

5.5   Recommendation For Future Research

For the future research, there are several suggestions that can be considered to provide a better research to investigate the factor that cause brain in Malaysia.

The first suggestion is the students are requires to understand few things about the target population before they determine the sample size therefore they can avoid the waste of resources to determine the sample size of the survey. Besides understand the population sizes in Malaysia there are also two measures that affect the accuracy of the data. First need to set the margin of error that expresses how frequently of the people who answer the survey is consider being wrong in the accepting the sample mean. There are few common confidence intervals which is 90% confident, 95% confident and 99% confident. Second is the confidence level which able to tell the investigator the percentage of the population that actually lie within the margin of error. After decided how much the accuracy of the sample data, the investigator can start to identify the sample size that they need therefore they can get the useful and data that generate the accurate and more reliable result in their investigation.

Next, the students must be having a proper planning when they conduct the research project therefore they can effectively help to the students to meet their expected goal. The project is based on the group effort so the member must allocate the task equally to the members who involve in the research project so the tasks or works that enable the group have better performance and productivity. Thus, the member must be organize the work by using scheduling so they can manage well the time that allocated for each of the tasks which able to look for useful information and secondary data to support their research project. As a result they can finish the works on time or earlier and able avoid the problem of lack of time to complete the each part of the research project.

Moreover, the members must be sending the reminder email to the respondents. It can increase the number of responses because some of them will do the survey immediately after received the online survey and some may not. As a result, the members are able to collect better information from the despondences and avoid bias in the data collection when they conduct.

5.6 Conclusion

Talent workforces in Malaysia are very important in workplace. It is very important to find out the factors that can cause Malaysian migrate to foreign countries. Employers should try to understand the needs and wants of the employees so that employees will stay longer in home country' company. Career development, job security, workplace environment and quality of life are very useful variables for the employers and government to help them the solution and make some improvement so that they can retain talented workforce to stay longer in home country.

REFERENCES

Abdullah, R., Karim, N. A., Patah, M. O. R., Zahari, H., Nair, G. K. S. & Jusoff, K. (2009). The linkage of employee satisfaction and loyalty in hotel industry in klang valley, Malaysia. *International Journal of Business and Management*, 4(10), 152-160. Retrieved April 20, 2014, from http://www.ccsenet.org/journal/index.php/ijbm/article/view/3961/3501

AIBattat, A. R. S. , Som, A. P. M. , (2013). Employee dissatisfaction and turnover crises in the Malaysian hospitality industry. *International journal of business and management.* 8, 62-71

Akomas, C. (2006), *Examining The Brain Drain Issues In Nigeria: A Strategic Management Approach For Higher Education*.

Avery, D. R. , Tonidandel, S. , Volpone, S. D. , Rahhuram, A. (n. d.). *When the Load Becomes Too Much to Bear: The Interactive Effects of Work Hours, Immigrant Status, and Interpersonal Justice on Work Overload*.

Barzegar, M., Afzal, E.,Tabibi, S. J., Delgoshaei, B. (2012). Relationship between leadership behavior, Quality of work life and human resources productivity: Data from Iran. *International of Hospital research.* Vol 1 (1), pg 1-14

Brum, S. (2007). *What impact does training have on employee commitment and employee turnover?* New York: University of Rhode Island.

Bustillo, R. M., & Pedraza, P. (2004). *Determinants of job insecurity in 5 European countries*. Spain: University of Salamanca.

Chandrasekar, K. , (2011). Workplace environment and its impact on organizational performance in public sector organizations. *Journal of enterprise computing and business system,* 1

Cheng, L. C. (2004). *The influence of human resource management practices on the retention of core employees of Australian organisations: An empirical study*. Unpublished doctoral dissertation, Murdoch University.

Chi, M. (2011). Unrealistic pay demands by fresh grads mar job hunt, survey finds. *The Malaysian Insider*. Retrieved May 10, from

http://www.themalaysianinsider.com/malaysia/article/unrealistic-pay-demands-by-fresh-grads-mar-job-hunt-survey-finds

Chinese brain drain: foreign moon is brighter?. (2013). Retrieved March 25, 2014, from http://varietymalaysia.blogspot.com/2013/01/chinese-brain-drain-foreign-moon-is.html

Chong, 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. *Proceeding of the International Conference on Social Science Research*, 695-705. Retrieved April 25, 2014, from http://worldconferences.net/proceedings/icssr2013/toc/199%20-%20yuen%20onn%20-%20PROPENSITY%20TO%20WORK%20ABROAD%20AMONGST%20GENERATION%20Y%20WORKING%20ADULTS%20IN%20MALAYSIA.pdf

Dekel, E & Pauzner, A. *Job Satifaction And Wage Gap*. Retrieved July 20, 2014, from http://sapir.tau.ac.il/papers/sapir-wp/%D7%A2%D7%93%D7%99%20%D7%A4%D7%95%D7%96%D7%A0%D7%A8%20%D7%95%D7%A2%D7%93%D7%99%20%D7%93%D7%A7%D7%9C%20%20%D7%9E%D7%A9%D7%95%D7%9C%D7%91%209-11.pdf

DRC Migration, Globalisation & Poverty (n.d.). *Health and education*. Retrieved March 12, 2014, from http://www.migrationdrc.org/research/keythemes/health_education.html

Esen, E. (2003). *SHRM® Job Satisfaction Series: Job Security Survey*. Retrieved June 10, 2014, from http://www.shrm.org/research/surveyfindings/documents/Job%20Satisfaction%20Series%20-%20Job%20Security%20Survey.pdf

Fatimah, S. Yusliza & Surienty, L. (2013). You are kind, you are smart, you are important: linkages between individual factors and the intention to repatriate among Malaysian self-initiated expatriates. *Journal of social and development sciences*, 4(11), 498-507. Retrieved March 20, 2014, from http://www.ifrnd.org/Research%20Papers/S4(11)3.pdf

Galinsky, E., Kim, S. S., and Bond, J. T. (2001). *Feeling overworked: When work becomes too much*, Retrieved from Families and work institute.

General social survey. (2010). Retrieved from http://www.cdc.gov/niosh/topics/stress/pdfs/qwl2010.pdf

Har, W. M., & Tan, J. (2013). *Chinese brain drain: Foreign moon is brighter?* Retrieved April 29, 2014, from http://varietymalaysia.blogspot.com/2013/01/chinese-brain-drain-foreign-moon-is.html

Hitam, M. B., & Borhan, H. B. (2012). FDI, Growth and the Environment: Impact on Quality of Life in Malaysia. *Procedia - Social and Behavioral Sciences*, 333-342.

Hornbill,U. (2011), Malaysia among 10 countries facing the biggest brain drain, WordPress. Retrieved July 1, 2014, from http://hornbillunleashed.wordpress.com/2011/08/01/21846/

Hugo, G. (2011). Malaysia Migration to Australia. *Malaysia Journal Economic Studies*, 147-174. Retrieved July 2, 2014

Jauhar, J. & Yusoff, Y. M. (2011). Brain drain: propensity to leave by Malaysian Professionals. International *Journal of Innovation, Management and Technology*, 2(2), 119-112

Jauhar, J., Yusoff, Y. M.& Khoo, M. Y. (2009). Factors that drive brain drain of accountants in malaysia. *Proceedings of the International Conference on Intellectual Capital, Knowledge Management & Organizational Learning*, 164-176

Job security. 2014. In *BusinessDictionary.com*. Retrieved February 25, 2014, from http://www.businessdictionary.com/definition/job-security.html

Kreisman, B. J., (2002). *Insights into employee motivation, commitment and retention*. Retrieved March 2, 2014, from http://www.businesstrainingexperts.com/white_papers/employee_retention/Employee%20Motivation,%20Commitment,%20&%20Retention.pdf

Labour Force Survey Report 2013. (2014). Retrieved July 10, 2014, from http://www.statistics.gov.my/portal/download_Labour/files/labour_force/Labour_Force_Survey_Report_Malaysia_2013.pdf

Leblebici, D. , (2012). Impact of workplace quality on employee's productivity: case study of a bank in Turkey. *Journal of business, economics and finance*, 1(1), 38-49

Lim, V. K. G., & Loo, G. L. (2003). Effects of parental job insecurity and parenting behaviors on youth's self-efficacy and work attitudes. *Journal of Vocational Behavior*, 63, 86–98.

Makasa, E., (n. d.). The human resource crisis in the Zambian health sector. *Medical journal of Zambia*, 35, 81-87

Malaysia Brain Drain Research Report. (n.d.). Retrieved March 29, 2014, from http://www.amsa.com.au/documents/MalaysiaBrainDrainResearchReport. pdf

Merchant, R. C., (n. d.). *The role of career development in improving organizational effectiveness and employee development*. Retrieved April 2, 2014, from http://sks.karabuk.edu.tr/kariyer/belgeler/THE_ROLE_OF_CAREER_DE VELOPMENT.pdf

Nelson, C. M. (2013, April 12). Poll: most women see bias in the workplace. *The Wall Street Journal*. Retrieved March 27, 2014, from http://online.wsj.com/news/articles/SB1000142412788732469510457841 7020376740796

Oberol, S. S. & Lin, V. (2006). Brain drain of doctors from southern Africa: brain gain for Australia. *Australian Health Review*, 30(1), 25-33.

Omamegbe, M.E. ,Beine et al. (2010), *African Brain Drain:A Narrative Inquiry On Human Capital Flight From Sub Saharan Africa To The United States*.

Phillips, P. (2002). *Is pay important? – Yes if you get it wrong*. Retrieved July 29, 2013, from http://www.managerwise.com/article.phtml?id=494

Quality of life. 2014. In *The Free Dictionary*. Retrieved February 25, 2014, from http://www.thefreedictionary.com/quality+of+life

Sajjad, N. (n. d.). Causes and solutions to intellectual brain drain in Pakistan. The Dialogue, 6(1), 31-55.

Saunders, M. Lewis, P. Thornhill, A. (2009). *Research methods for business students* (5th ed.). Rotolito Lombarda: Pearson Education Limited.

Semela & Ayalew Jan 2011; Teferra 1992(2011); Vulnerability to Brain-Drain among Academics in Institutions of Higher Learning in Ethiopia. Asian Social Science. 1(1)

Semela, T. (2011). Vulnerability to brain-drain among academics in institutions of higher learning in ethiopia. Asian Social Science, 7(1), 3-18

Sharma, Y. (2014, October 22). Asia's parents suffering 'education fever'. *BBC News Business*. Retrieved May 15, 2014, from http://www.bbc.com/news/business-24537487

Suleiman AlBattat, A. R., & Puad Mat Som, A. (2013). Employee dissatisfaction and turnover crises in the Malaysian hospitality industry. *International Journal of Business and Management, 8*(5).

Sveinsdottir, H., Biering, P., & Ramel, A. (2006). Occupational stress, job satisfaction, and working environment among Icelandic nurses: A cross-sectional questionnaire survey. *International Journal of Nursing Studies*, 875-889.

Sverke, M., Hellgren, J., & Näswall, K. (2006). *Job insecurity: A literature review*. Stockholm, Sweden: National Institute for Working Life.

Tansel, A. & Gungor, N. D. (2003). "Brain drain" from Turkey: Survey evidence of student non-return. *Career Development International*, 8(2), pg 52-89

Tetteh et. Al. (2012). *Work environment and its impact on employee's performance.* Unpublished University's dissertation, Christian service University College.

The World Bank. (2011). *Malaysia economic monitor: brain drain*. Retrieved March 1, 2014, from http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2011/0

5/02/000356161_20110502023920/Rendered/PDF/614830WP0malay10B ox358348B01PUBLIC1.pdf

Tishman, F. M. , Looy, S. V. , Bruyere, S. M. , (2012). Employer strategies for responding to an aging workplace, Retrieved from The Ntar Leadership Center.

Working environment risk and other job-related stress factors in Autria. (1999). Retrieved April, 12, from http://www.eurofound.europa.eu/working/surveys/AT0503SR01/AT0503S R01.pdf

Ye, J., Cardon, M. S., & Rivera, E. (2012). A mutuality perspective of psychological contracts regarding career development and job security. *Journal of Business Research*, 294-301.

Zainal, N. R., Kaur, G., Ahmad, N. A., & Khalili, J. M. (2012). Housing Conditions and Quality of Life of the Urban Poor in Malaysia. *Procedia - Social and Behavioral Sciences*, 827-838.

Zeher, D. B., (2011). Gender discrimination at work: Connecting gender stereotypes institutional policies, and gender composition of workplace. *Gender and society,* 764-786
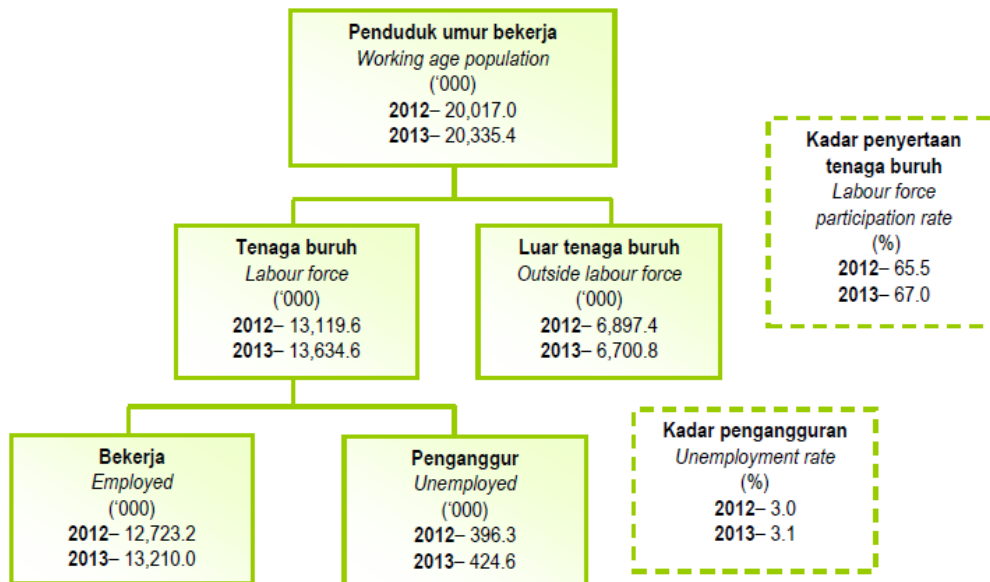
Zikmund, W. G, Babin, B. J., Carr, J. C., & Griffin, M. (2010). Business Research Methods (8th ed.). New York: South- Western/ Cengage Learning.

Zikmund, W. G. (2003). Business research methods (7th ed.). Mason, OH: Thomson South-Western.

Zimmerman, C. Kiss, L. Hossain, M. (2011). Migration and health: a framework for 21st century policy making. *PLoS Medicine*, 8(5), 1-7

APPENDIX

APPENDIX 3.1: MALAYSIA LABOUR FORCE IN 2012 AND 2013

Carta 1: Perangkaan utama tenaga buruh, Malaysia, 2012 dan 2013
Chart 1: Principal statistics of labour force, Malaysia, 2012 and 2013

Penduduk umur bekerja
Working age population
('000)
2012– 20,017.0
2013– 20,335.4

Kadar penyertaan tenaga buruh
Labour force participation rate
(%)
2012– 65.5
2013– 67.0

Tenaga buruh
Labour force
('000)
2012– 13,119.6
2013– 13,634.6

Luar tenaga buruh
Outside labour force
('000)
2012– 6,897.4
2013– 6,700.8

Bekerja
Employed
('000)
2012– 12,723.2
2013– 13,210.0

Penganggur
Unemployed
('000)
2012– 396.3
2013– 424.6

Kadar pengangguran
Unemployment rate
(%)
2012– 3.0
2013– 3.1

APPENDIX 3.2: PERMISSION LETTER TO CONDUCT SURVEY

UNIVERSITI TUNKU ABDUL RAHMAN
Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

9th June 2014

To Whom It May Concern

Dear Sir/Madam

Permission to Conduct Survey

This is to confirm that the following students are currently pursuing their *Bachelor of Business Administration (Hons)* program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

Name of Student	Student ID
TENG KEE MIN	12ABB07090
YEE CHYE CHUN	12ABB07503
LEE KAR SING	12ABB07613
LEE WEN SAM	12ABB07502
WONG SIEW FATT	12ABB07498

If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely

....
Mr Kuek Thiam Yong
Head of Department,
Faculty of Business and Finance
Email: kuekty@utar.edu.my

....
Mr Tho Mun Sin
Supervisor,
Faculty of Business and Finance
Email: thoms@utar.edu.my

Address: 9, Jalan Bersatu 13/4, 46200 Petaling Jaya, Selangor Darul Ehsan, Malaysia   Postal Address: P O Box 11384, 50744 Kuala Lumpur, Malaysia
Tel: (603) 7958 2628 Fax: (603) 7956 1923 Homepage: http:/www.utar.edu.my

APPENDIX 3.3: QUESTIONNAIRE

Universiti Tunku Abdul Rahman

The Factors That Cause Brain Drain Among Malaysian In Workplace.

Dear respondent:

We are students pursuing Bachelor of Business Administration (Hons) from Universiti Tunku Abdul Rahman (UTAR). We are currently doing our research proposal with the title of "The Factors That Cause Brain Drain among Malaysian in Workplace".

The purpose of this research is to identify the factor the affect brain drain issue among Malaysian. This research will help to discover the main reason that causing brain drain issue frequency rise.

This questionnaire consists of 3 parts. Part A is about personal details of the respondents, Part B related to the several factor that causing brain drain issue happened, and Part C is the general information of brain drain issue toward Malaysian.

Finally, please read the instruction carefully before answering question. Thank you for your cooperation and willingness to answer the questionnaire. Your response will be kept confidential and be used solely for academic propose.

Sincerely,
Teng Kee Min   1207090
Lee Kar Sing   1207613
Lee Wen Sam   1207502
Wong Siew Fatt   1207498
Yee Chye Chun   1207503

Questionnaire

Part A: Personal details

Please place [√]in the appropriate answer.

1) What is your gender?

[   ] Male   [   ] Female

2) What is your age?

[   ] Below 25 years old

[   ] 25-29 years old

[   ] 30-34 years old

[   ] 35-39 years old

3) What is your education level?

[   ] SPM

[   ] STPM/ Diploma

[   ] Degree

[   ] Master

[   ] PHD

[   ] Others

4) What is your race?

[   ] Chinese

[   ] Malay

[   ] Indian

[   ] Others

5) What is your marital status?

[   ] Single

[   ] Married

[   ] Others

6) What is your income level?

[   ] less that RM2001

[   ] RM2001-RM3000

[   ] RM3001-RM4000

[   ] RM4001-RM5000

[   ] RM5001 and above

Part B: Factor that causing brain drain issue
SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA= Strongly Agree

Independent Variables	SD	D	N	A	SA
Career Development					
6. I have a clear prospect of career development in my home country's company.	1	2	3	4	5
7. Requirement on job are clear.	1	2	3	4	5
8. My organisation provides me different opportunity to achieve my career objective or goals.	1	2	3	4	5
9. My organization has show to involve and support my long term career development	1	2	3	4	5
10. I feel that my skills and expertise are put to their best use.					
Job Security					
8. My job is secure.	1	2	3	4	5
9. My workload is reasonable.	1	2	3	4	5
10. I like to have long term relationship with my current company.	1	2	3	4	5
11. I feel secure even though my employment contract comes to the end.	1	2	3	4	5
12. I am satisfied with my salary.	1	2	3	4	5
Working Environment					
6. I feel comfortable to work in my workplace.	1	2	3	4	5
7. My workplace is stressful.	1	2	3	4	5
8. I feel discrimination in my workplace.	1	2	3	4	5
9. I received enough resources and facilities to do my job properly.	1	2	3	4	5
10. Physical work condition is good.	1	2	3	4	5
Quality of life					
6. I am more satisfied with foreign country as a living place when compared with my local area.	1	2	3	4	5
7. I feel more secure in foreign country when compared with Malaysia.	1	2	3	4	5
8. I will leave my country if I can get better education opportunities for my children in other countries.	1	2	3	4	5
9. I believe that standards of living are better abroad.	1	2	3	4	
10. I am intention to move to other country because of family related matters.	1	2	3	4	5

Part C: General information of brain drain issue toward Malaysian

Dependence Variables	SD	D	N	A	SA
1. I will consider to live in another country.	1	2	3	4	5
2. I will willing to go if a job opportunity is available in foreign country,.	1	2	3	4	5
3. A stressful working environment will cause the employee to quit from a job.	1	2	3	4	5
4. I have family commitments that will eventually lead me back to Malaysia.	1	2	3	4	5
5. I want to work abroad in the future.	1	2	3	4	5

APPENDIX 3.4: RELIABILITY TEST (PILOT TEST)

Career Development

Reliability Test (Career Development)

The CORR Procedure

5 Variables: CD1 CD2 CD3 CD4 CD5

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
CD1	30	2.33333	1.37297	70.00000	1.00000	5.00000	I have a clear prospect of career development in my home country's company, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD2	30	2.23333	1.22287	67.00000	1.00000	5.00000	Requirement on job are clear, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD3	30	2.36667	1.40156	71.00000	1.00000	5.00000	My organisation provides me different opportunity to achieve my career objective or goals, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD4	30	2.60000	1.30252	78.00000	1.00000	5.00000	4.My organization has show to involve and support my long term career development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD5	30	2.33333	1.34762	70.00000	1.00000	5.00000	I feel that my skills and expertise are put to their best use, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Cronbach Coefficient Alpha

Variables	Alpha
Raw	0.887385
Standardized	0.888073

Cronbach Coefficient Alpha with Deleted Variable

Deleted Variable	Raw Variables Correlation with Total	Raw Variables Alpha	Standardized Variables Correlation with Total	Standardized Variables Alpha	Label
CD1	0.530209	0.907739	0.528110	0.907685	I have a clear prospect of career development in my home country's company, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD2	0.791947	0.850001	0.792038	0.849014	Requirement on job are clear, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD3	0.875620	0.826134	0.876379	0.828768	My organisation provides me different opportunity to achieve my career objective or goals, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD4	0.599504	0.890925	0.602096	0.891937	4.My organization has show to involve and support my long term career development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD5	0.870124	0.828637	0.868404	0.830714	I feel that my skills and expertise are put to their best use, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Pearson Correlation Coefficients, N = 30
Prob > |r| under H0: Rho=0

	CD1	CD2	CD3	CD4	CD5
CD1	1.00000	0.40392	0.52564	0.42421	0.51562
I have a clear prospect of career development in my home country's company, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data		0.0269	0.0029	0.0195	0.0035
CD2	0.40392	1.00000	0.81349	0.60184	0.80908
Requirement on job are clear, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	0.0269		<.0001	0.0004	<.0001
CD3	0.52564	0.81349	1.00000	0.53645	0.97369
My organisation provides me different opportunity to achieve my career objective or goals, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	0.0029	<.0001		0.0022	<.0001
CD4	0.42421	0.60184	0.53645	1.00000	0.53041
4.My organization has show to involve and support my long term career development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	0.0195	0.0004	0.0022		0.0026
CD5	0.51562	0.80908	0.97369	0.53041	1.00000
I feel that my skills and expertise are put to their best use, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	0.0035	<.0001	<.0001	0.0026	

Job Security

Reliability Test (Job Security)

The CORR Procedure

5 Variables: JS1 JS2 JS3 JS4 JS5

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
JS1	30	2.26667	1.33735	68.00000	1.00000	5.00000	My job is secure, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS2	30	2.26667	1.28475	68.00000	1.00000	5.00000	My work are reasonable, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS3	30	2.33333	1.34762	70.00000	1.00000	5.00000	I like to have long term relationship with my current company, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS4	30	2.60000	1.37966	78.00000	1.00000	5.00000	I feel secure even though my employment contract comes to the end, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS5	30	2.30000	1.29055	69.00000	1.00000	5.00000	I am satisfied with my salary, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Cronbach Coefficient Alpha

Variables	Alpha
Raw	0.887891
Standardized	0.889535

Cronbach Coefficient Alpha with Deleted Variable

Deleted Variable	Raw Variables Correlation with Total	Alpha	Standardized Variables Correlation with Total	Alpha	Label
JS1	0.552547	0.902542	0.552540	0.904640	My job is secure, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS2	0.828086	0.841092	0.829904	0.842555	My work are reasonable, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS3	0.841803	0.836461	0.845896	0.838738	I like to have long term relationship with my current company, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS4	0.587516	0.896197	0.587480	0.897238	I feel secure even though my employment contract comes to the end, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS5	0.861159	0.833213	0.862840	0.834664	I am satisfied with my salary, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Pearson Correlation Coefficients, N = 30
Prob > |r| under H0: Rho=0

	JS1	JS2	JS3	JS4	JS5
JS1	1.00000	0.51913	0.48471	0.43359	0.51147
My job is secure, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data		0.0033	0.0066	0.0167	0.0039
JS2	0.51913	1.00000	0.84314	0.52915	0.84438
My work are reasonable, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.0033		<.0001	0.0026	<.0001
JS3	0.48471	0.84314	1.00000	0.53785	0.91205
I like to have long term relationship with my current company, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.0066	<.0001		0.0022	<.0001
JS4	0.43359	0.52915	0.53785	1.00000	0.55389
I feel secure even though my employment contract comes to the end, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.0167	0.0026	0.0022		0.0015
JS5	0.51147	0.84438	0.91205	0.55389	1.00000
I am satisfied with my salary, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.0039	<.0001	<.0001	0.0015	

Workplace Environment

Reliability Test (Workplace Environment)
The CORR Procedure

5 Variables: wk1   WK2 (R) WK3 (R) wk4   wk5

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
wk1	30	2.26667	1.25762	68.00000	1.00000	5.00000	I feel comfortable to work in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
WK2 (R)	30	2.33333	1.34762	70.00000	1.00000	5.00000	My workplace is stressful, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
WK3 (R)	30	2.23333	1.22287	67.00000	1.00000	5.00000	I feel disrimination in my workplace, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
wk4	30	2.66667	1.39786	80.00000	1.00000	5.00000	I received enough resources and facilities to my job properly, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk5	30	2.40000	1.30252	72.00000	1.00000	5.00000	physical work condition is good, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Cronbach Coefficient Alpha

Variables	Alpha
Raw	0.881607
Standardized	0.882704

Cronbach Coefficient Alpha with Deleted Variable

Deleted Variable	Raw Variables Correlation with Total	Raw Variables Alpha	Standardized Variables Correlation with Total	Standardized Variables Alpha	Label
wk1	0.535484	0.895586	0.534366	0.898750	I feel comfortable to work in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
WK2 (R)	0.827515	0.828579	0.831517	0.830257	My workplace is stressful, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
WK3 (R)	0.766668	0.845505	0.764548	0.846501	I feel disrimination in my workplace, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
wk4	0.577812	0.890485	0.577814	0.889303	I received enough resources and facilities to my job properly, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk5	0.906761	0.809583	0.908823	0.810903	physical work condition is good, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Pearson Correlation Coefficients, N = 30
Prob > |r| under H0: Rho=0

	wk1	WK2 (R)	WK3 (R)	wk4	wk5
wk1	1.00000	0.47474	0.38416	0.38576	0.62731
I feel comfortable to work in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data		0.0080	0.0361	0.0353	0.0002
WK2 (R)	0.47474	1.00000	0.83000	0.51864	0.88402
My workplace is stressful, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.0080		<.0001	0.0033	<.0001
WK3 (R)	0.38416	0.83000	1.00000	0.51103	0.80535
I feel disrimination in my workplace, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.0361	<.0001		0.0039	<.0001
wk4	0.38576	0.51864	0.51103	1.00000	0.58710
I received enough resources and facilities to my job properly, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	0.0353	0.0033	0.0039		0.0006
wk5	0.62731	0.88402	0.80535	0.58710	1.00000
physical work condition is good, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	0.0002	<.0001	<.0001	0.0006	

Quality of Life

Reliability Test (Quality of Life)

The CORR Procedure

5 Variables: QF1 QF2 QF3 QF4 QF5

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
QF1	30	3.76667	1.30472	113.00000	1.00000	5.00000	I am more satisfied with foreign country as a living place when compared with my local area, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF2	30	3.76667	1.22287	113.00000	1.00000	5.00000	I feel more secure in foreign country when compared with Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF3	30	3.66667	1.34762	110.00000	1.00000	5.00000	I will leave my country if i can get better education opportunities for my children in other countries, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF4	30	3.50000	1.30648	105.00000	1.00000	5.00000	I believe that standards of living are better abroad, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF5	30	3.70000	1.29055	111.00000	1.00000	5.00000	I am intention to move to other country because of family related matters, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Cronbach Coefficient Alpha

Variables	Alpha
Raw	0.917105
Standardized	0.917634

Cronbach Coefficient Alpha with Deleted Variable

Deleted Variable	Raw Variables Correlation with Total	Raw Variables Alpha	Standardized Variables Correlation with Total	Standardized Variables Alpha	Label
QF1	0.827811	0.890007	0.827043	0.891111	I am more satisfied with foreign country as a living place when compared with my local area, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF2	0.855594	0.885502	0.855445	0.885234	I feel more secure in foreign country when compared with Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF3	0.905263	0.872997	0.905843	0.874632	I will leave my country if i can get better education opportunities for my children in other countries, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF4	0.473904	0.958327	0.476092	0.958133	I believe that standards of living are better abroad, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF5	0.910396	0.872822	0.909060	0.873948	I am intention to move to other country because of family related matters, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Pearson Correlation Coefficients, N = 30
Prob > |r| under H0: Rho=0

	QF1	QF2	QF3	QF4	QF5
QF1	1.00000	0.74275	0.85638	0.39447	0.87855
I am more satisfied with foreign country as a living place when compared with my local area, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data		<.0001	<.0001	0.0310	<.0001
QF2	0.74275	1.00000	0.83000	0.55038	0.82811
I feel more secure in foreign country when compared with Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001		<.0001	0.0016	<.0001
QF3	0.85638	0.83000	1.00000	0.43088	0.97153
I will leave my country if i can get better education opportunities for my children in other countries, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001		0.0175	<.0001
QF4	0.39447	0.55038	0.43088	1.00000	0.41925
I believe that standards of living are better abroad, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.0310	0.0016	0.0175		0.0211
QF5	0.87855	0.82811	0.97153	0.41925	1.00000
I am intention to move to other country because of family related matters, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001	<.0001	0.0211	

Brain Drain

Reliability Test (Brain Drain)

The CORR Procedure

5 Variables: BD1 BD2 BD3 BD4 BD5

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
BD1	30	3.70000	1.26355	111.00000	1.00000	5.00000	I will consider to live in another country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD2	30	3.73333	1.20153	112.00000	1.00000	5.00000	I will willing to go if a job opportunity is available in foreign country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD3	30	3.70000	1.36836	111.00000	1.00000	5.00000	A stressful working environment will cause the employee to quit from a job, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD4	30	3.46667	1.27937	104.00000	1.00000	5.00000	I have family commitments that will eventually lead me back to Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD5	30	3.63333	1.24522	109.00000	1.00000	5.00000	I want to work abroad in the future, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Cronbach Coefficient Alpha

Variables	Alpha
Raw	0.915334
Standardized	0.915847

Cronbach Coefficient Alpha with Deleted Variable

Deleted Variable	Raw Variables Correlation with Total	Alpha	Standardized Variables Correlation with Total	Alpha	Label
BD1	0.820737	0.888627	0.818669	0.889849	I will consider to live in another country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD2	0.845416	0.884549	0.843971	0.884585	I will willing to go if a job opportunity is available in foreign country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD3	0.896165	0.871559	0.898253	0.873103	A stressful working environment will cause the employee to quit from a job, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD4	0.494780	0.952003	0.497515	0.951923	I have family commitments that will eventually lead me back to Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD5	0.893070	0.873891	0.890625	0.874732	I want to work abroad in the future, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Pearson Correlation Coefficients, N = 30
Prob > |r| under H0: Rho=0

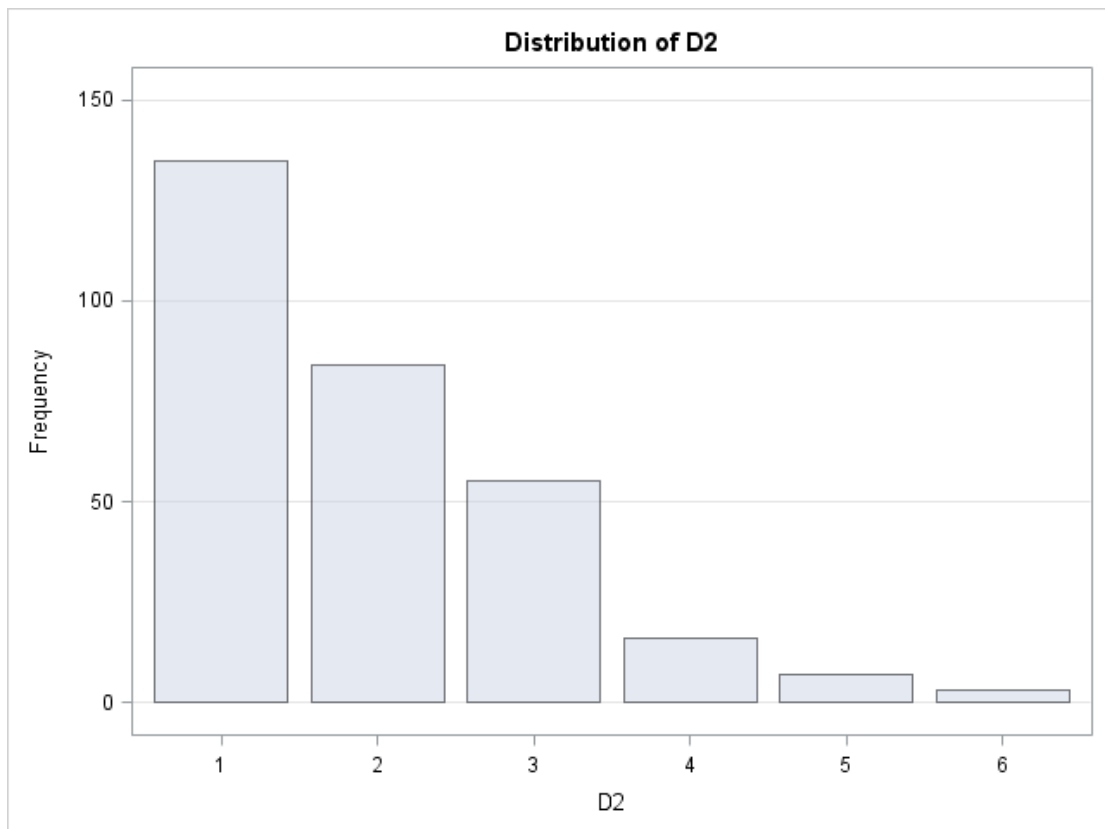|	BD1	BD2	BD3	BD4	BD5
BD1	1.00000	0.69502	0.84363	0.45222	0.84815
I will consider to live in another country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data		<.0001	<.0001	0.0121	<.0001
BD2	0.69502	1.00000	0.85151	0.55482	0.80819
I will willing to go if a job opportunity is available in foreign country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001		<.0001	0.0015	<.0001
BD3	0.84363	0.85151	1.00000	0.41758	0.94509
A stressful working environment will cause the employee to quit from a job, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001		0.0217	<.0001
BD4	0.45222	0.55482	0.41758	1.00000	0.43579
I have family commitments that will eventually lead me back to Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.0121	0.0015	0.0217		0.0161
BD5	0.84815	0.80819	0.94509	0.43579	1.00000
I want to work abroad in the future, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001	<.0001	0.0161	

APPENDIX 4.1: RESPONDENT DEMOGRAPHIC PROFILE

1. Gender

D1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	186	62.00	186	62.00
2	114	38.00	300	100.00

What is your gender?, 1=Male, 2=Female, 99=Missing Data

Distribution of D1

2. Age
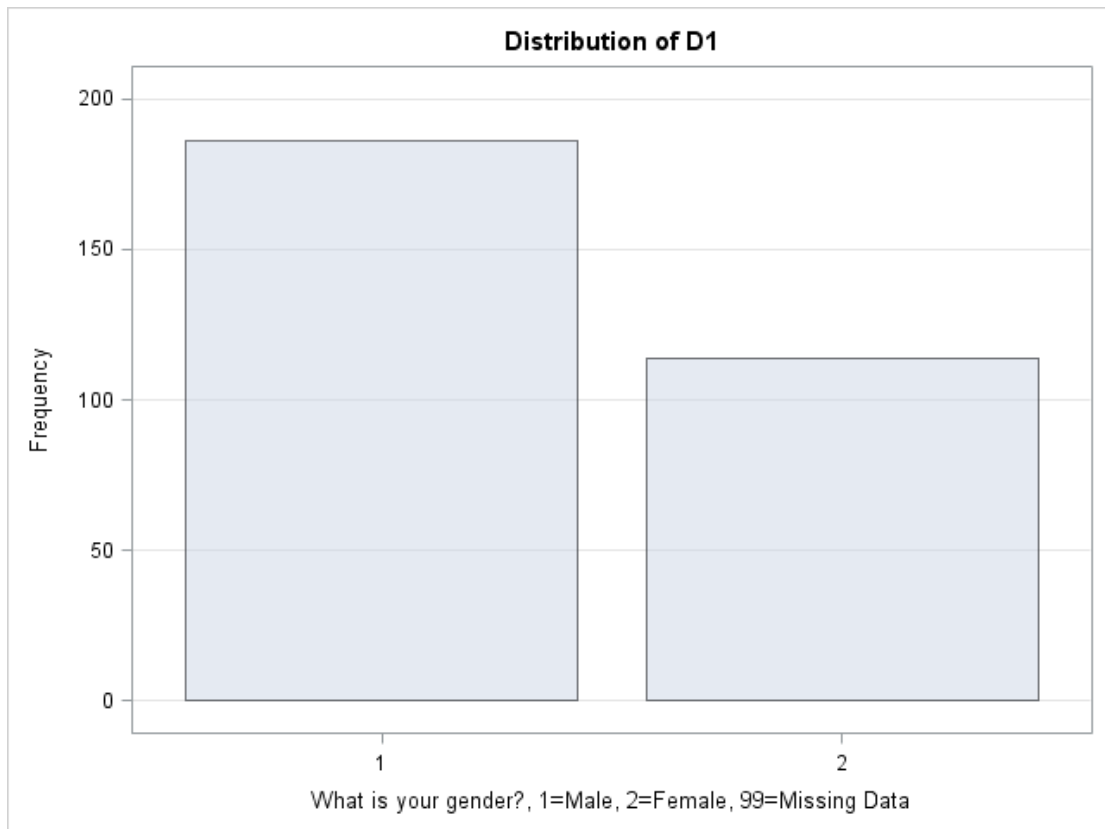
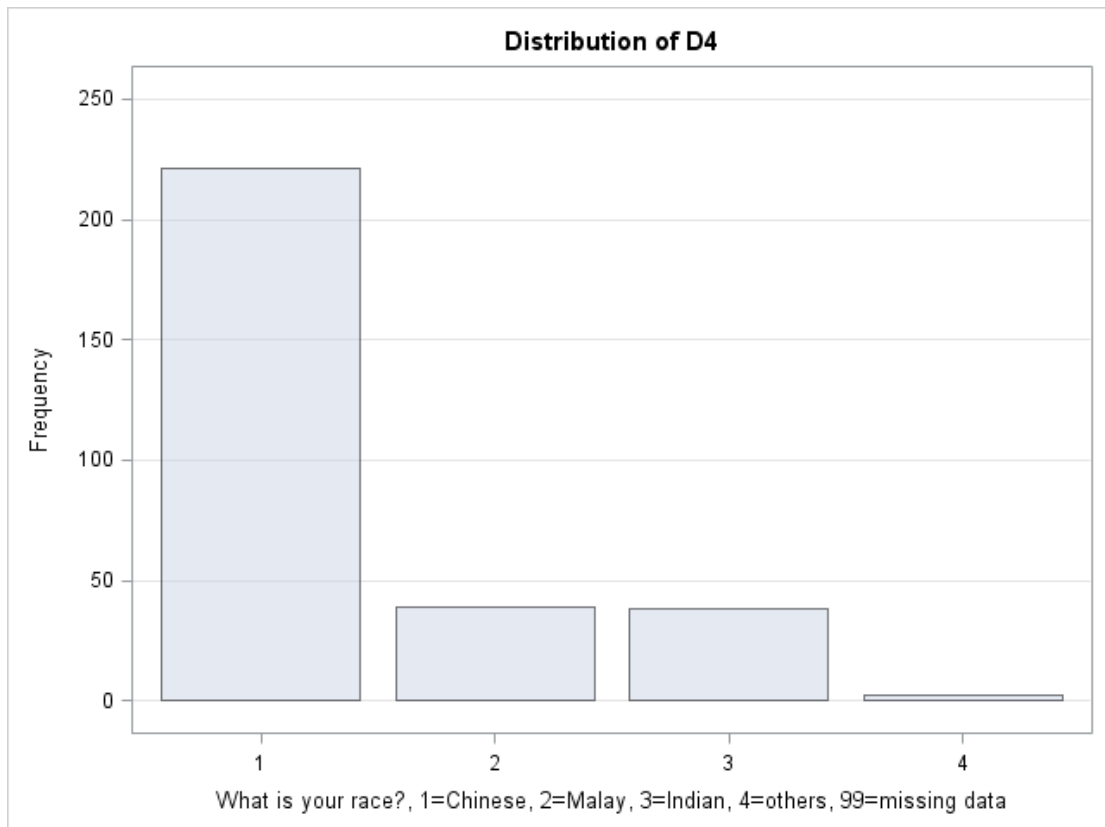| D2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
What is your age?, 1=below 25 years old, 2=25-29 years old, 3=30-34 years old, 4=35-39 years old, 5=40-44 years old, 6=45 years old and above, 99=missing data				
1	135	45.00	135	45.00
2	84	28.00	219	73.00
3	55	18.33	274	91.33
4	16	5.33	290	96.67
5	7	2.33	297	99.00
6	3	1.00	300	100.00

Distribution of D2

3. Education Level

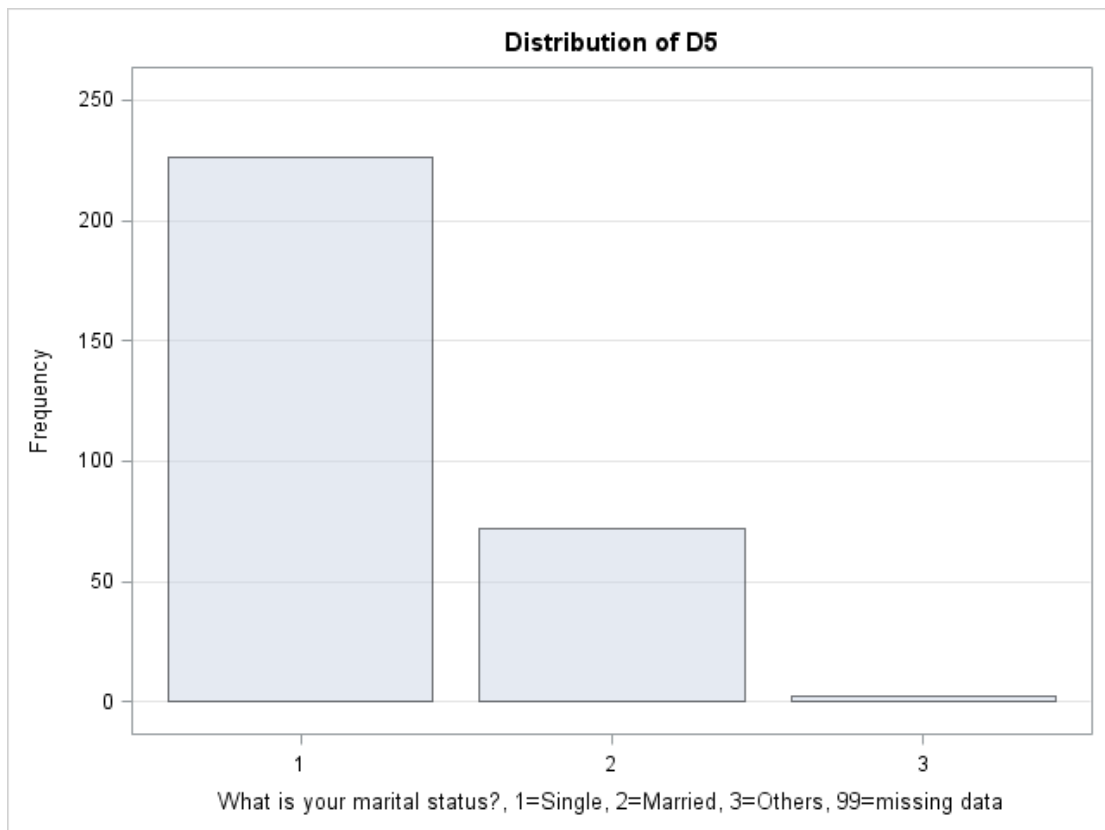| D3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
What is your education?, 1=SPM, 2=STPM/Diploma, 3=Degree, 4=Master, 5=PHD, 6=other, 99=missing data				
1	26	8.67	26	8.67
2	84	28.00	110	36.67
3	149	49.67	259	86.33
4	30	10.00	289	96.33
5	4	1.33	293	97.67
6	7	2.33	300	100.00

Distribution of D3

4. Race
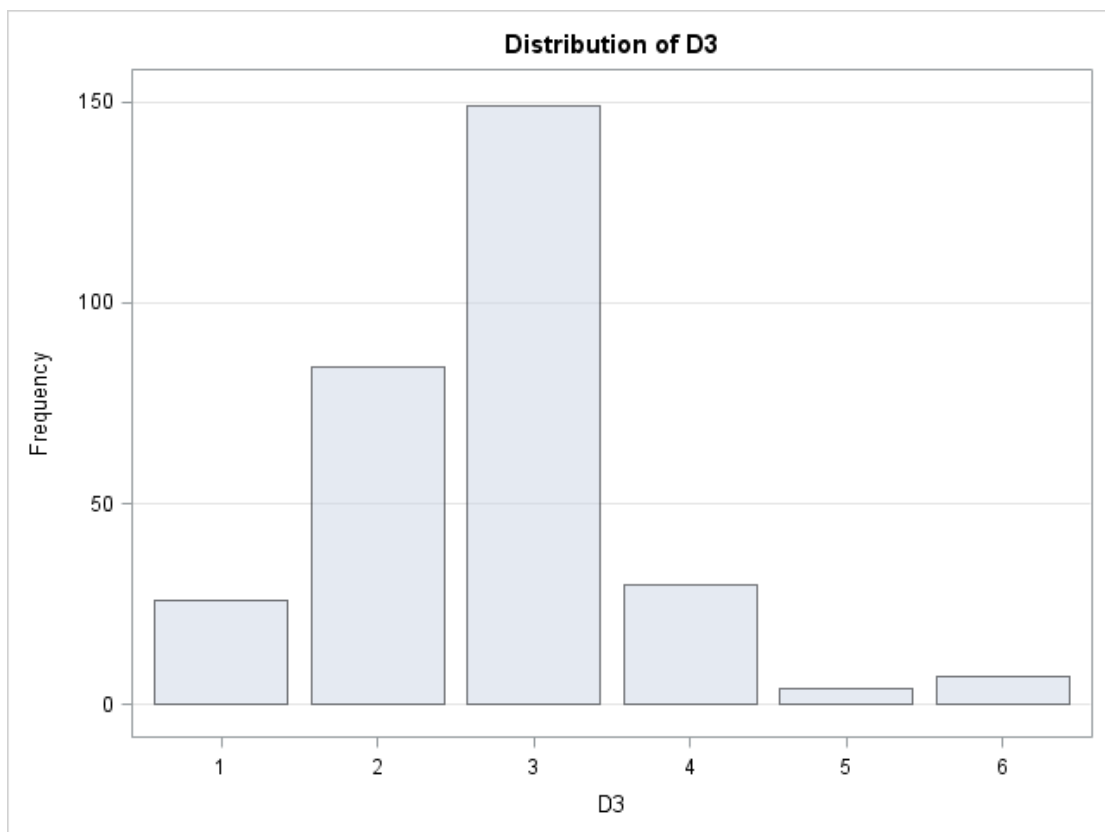
D4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
What is your race?, 1=Chinese, 2=Malay, 3=Indian, 4=others, 99=missing data
1	221	73.67	221	73.67
2	39	13.00	260	86.67
3	38	12.67	298	99.33
4	2	0.67	300	100.00

5. Marital Status
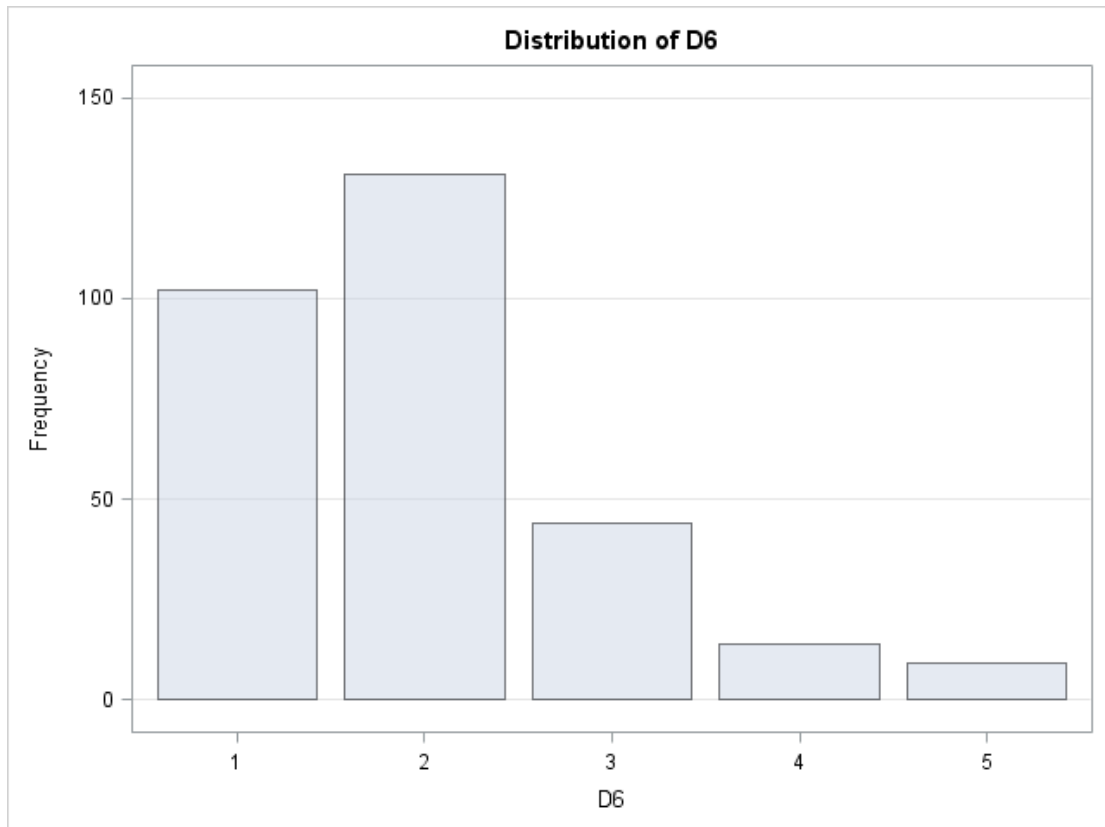
D5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
What is your marital status?, 1=Single, 2=Married, 3=Others, 99=missing data				
1	226	75.33	226	75.33
2	72	24.00	298	99.33
3	2	0.67	300	100.00

Distribution of D5

6. Income Level

D6	Frequency	Percent	Cumulative Frequency	Cumulative Percent
What is your income level?, 1=Less than RM2001, 2=RM2001-RM3000, 3=RM3001-RM4000, 4=RM4001-RM5000, 5=RM5001 and above, 99=missing data				
1	102	34.00	102	34.00
2	131	43.67	233	77.67
3	44	14.67	277	92.33
4	14	4.67	291	97.00
5	9	3.00	300	100.00

Distribution of D6

Appendix 4.2: Central Tendencies Measurement of Construct

Career Development (Independent Variables)

CD1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
I have a clear prospect for career development in my home country's company, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data					
1	126	42.00	126	42.00
2	134	44.67	260	86.67
3	10	3.33	270	90.00
4	17	5.67	287	95.67
5	13	4.33	300	100.00

CD2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Requirement on job are clear, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data					
1	118	39.33	118	39.33
2	111	37.00	229	76.33
3	17	5.67	246	82.00
4	12	4.00	258	86.00
5	42	14.00	300	100.00

CD3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
My organisation provides me different opportunity to achieve my career objective or goals., 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data					
1	214	71.33	214	71.33
2	48	16.00	262	87.33
3	1	0.33	263	87.67
4	17	5.67	280	93.33
5	20	6.67	300	100.00

CD4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
My organization has show to involve and support my long term career development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data					
1	187	62.33	187	62.33
2	53	17.67	240	80.00
3	13	4.33	253	84.33
4	34	11.33	287	95.67
5	13	4.33	300	100.00

Frequency	Percent	Cumulative Frequency	Cumulative Percent
I feel that my skills and expertise are put to their best use, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data			
149	49.67	149	49.67
112	37.33	261	87.00
1	0.33	262	87.33
27	9.00	289	96.33
11	3.67	300	100.00

Job Security

JS1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
My job is secure, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	158	52.67	158	52.67
2	108	36.00	266	88.67
3	4	1.33	270	90.00
4	18	6.00	288	96.00
5	12	4.00	300	100.00

JS2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
My work is reasonable, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	154	51.33	154	51.33
2	106	35.33	260	86.67
3	9	3.00	269	89.67
4	10	3.33	279	93.00
5	21	7.00	300	100.00

JS3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
I like to have long term relationship with my current company, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	192	64.00	192	64.00
2	67	22.33	259	86.33
3	3	1.00	262	87.33
4	10	3.33	272	90.67
5	28	9.33	300	100.00

JS4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
I feel secure even though my employment contract comes to the end, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	131	43.67	131	43.67
2	93	31.00	224	74.67
3	11	3.67	235	78.33
4	45	15.00	280	93.33
5	20	6.67	300	100.00

I am satisfied with my salary, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
JS5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	124	41.33	124	41.33
2	138	46.00	262	87.33
4	37	12.33	299	99.67
5	1	0.33	300	100.00

Workplace Environment

I feel comfortable to work in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data				
wk1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	216	72.00	216	72.00
2	41	13.67	257	85.67
3	11	3.67	268	89.33
4	16	5.33	284	94.67
5	16	5.33	300	100.00

My workplace is stressful, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data				
wk2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	12	4.00	12	4.00
2	15	5.00	27	9.00
3	18	6.00	45	15.00
4	91	30.33	136	45.33
5	164	54.67	300	100.00

I feel discrimination in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data				
wk3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	25	8.33	25	8.33
2	15	5.00	40	13.33
3	5	1.67	45	15.00
4	48	16.00	93	31.00
5	207	69.00	300	100.00

I received enough resources and facilities to my job properly, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data				
wk4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	121	40.33	121	40.33
2	110	36.67	231	77.00
3	17	5.67	248	82.67
4	29	9.67	277	92.33
5	23	7.67	300	100.00

Physical work condition is good, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data				
wk5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	171	57.00	171	57.00
2	86	28.67	257	85.67
3	3	1.00	260	86.67
4	30	10.00	290	96.67
5	10	3.33	300	100.00

Quality of Life

I am more satisfied with foreign country as a living place when compared with my local area, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
QF1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	12	4.00	12	4.00
2	24	8.00	36	12.00
3	5	1.67	41	13.67
4	118	39.33	159	53.00
5	141	47.00	300	100.00

I feel more secure in foreign country when compared with Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
QF2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	13	4.33	13	4.33
2	10	3.33	23	7.67
3	17	5.67	40	13.33
4	203	67.67	243	81.00
5	57	19.00	300	100.00

I will leave my country if i can get better education opportunities for my children in other countries, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
QF3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	59	19.67	59	19.67
2	23	7.67	82	27.33
4	111	37.00	193	64.33
5	107	35.67	300	100.00

I believe that standards of living are better abroad, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
QF4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	18	6.00	18	6.00
2	43	14.33	61	20.33
3	1	0.33	62	20.67
4	123	41.00	185	61.67
5	115	38.33	300	100.00

I am intention to move to other country because of family related matters, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
QF5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	11	3.67	11	3.67
2	28	9.33	39	13.00
3	1	0.33	40	13.33
4	123	41.00	163	54.33
5	137	45.67	300	100.00

Brain Drain (Dependent Variables)

BD1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
I will consider to live in another country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	14	4.67	14	4.67
2	20	6.67	34	11.33
3	4	1.33	38	12.67
4	147	49.00	185	61.67
5	115	38.33	300	100.00

BD2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
I will willing to go if a job opportunity is available in foreign country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	8	2.67	8	2.67
2	13	4.33	21	7.00
3	17	5.67	38	12.67
4	153	51.00	191	63.67
5	109	36.33	300	100.00

BD3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A stressful working environment will cause the employee to quit from a job, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	14	4.67	14	4.67
2	24	8.00	38	12.67
4	123	41.00	161	53.67
5	139	46.33	300	100.00

BD4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
I have family commitments that will eventually lead me back to Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	12	4.00	12	4.00
2	47	15.67	59	19.67
3	5	1.67	64	21.33
4	151	50.33	215	71.67
5	85	28.33	300	100.00

BD5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
I want to work abroad in the future, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data				
1	10	3.33	10	3.33
2	28	9.33	38	12.67
4	163	54.33	201	67.00
5	99	33.00	300	100.00

APPENDIX 4.3 RELIABILITY TEST

Career Development

Reliability Test (Carrer Development)

The CORR Procedure

5 Variables: CD1   CD2   CD3   CD4   CD5

Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
CD1	300	1.85667	1.02614	557.00000	1.00000	5.00000	I have a clear prospect for career development in my home country's company, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD2	300	2.16333	1.35996	649.00000	1.00000	5.00000	Requirement on job are clear, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD3	300	1.60333	1.17925	481.00000	1.00000	5.00000	My organisation provides me different opportunity to achieve my career objective or goals., 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD4	300	1.77667	1.21037	533.00000	1.00000	5.00000	My organization has show to involve and support my long term career development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD5	300	1.79667	1.07354	539.00000	1.00000	5.00000	I feel that my skills and expertise are put to their best use, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Cronbach Coefficient Alpha	
Variables	Alpha
Raw	0.876294
Standardized	0.885936

	Raw Variables		Standardized Variables		
Cronbach Coefficient Alpha with Deleted Variable					
Deleted Variable	Correlation with Total	Alpha	Correlation with Total	Alpha	Label
CD1	0.728149	0.847365	0.738404	0.858011	I have a clear prospect for career development in my home country's company, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD2	0.450795	0.919675	0.448610	0.921170	Requirement on job are clear, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD3	0.853026	0.813385	0.861145	0.828681	My organisation provides me different opportunity to achieve my career objective or goals., 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD4	0.756958	0.837348	0.767612	0.851175	My organization has show to involve and support my long term career development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
CD5	0.825918	0.824115	0.833413	0.835447	I feel that my skills and expertise are put to their best use, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Pearson Correlation Coefficients, N = 300 Prob > |r| under H0: Rho=0					
	CD1	CD2	CD3	CD4	CD5
CD1	1.00000	0.31641	0.74056	0.69311	0.72335
I have a clear prospect for career development in my home country's company, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data		<.0001	<.0001	<.0001	<.0001
CD2	0.31641	1.00000	0.48056	0.38390	0.43287
Requirement on job are clear, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001		<.0001	<.0001	<.0001
CD3	0.74056	0.48056	1.00000	0.74143	0.83694
My organisation provides me different opportunity to achieve my career objective or goals., 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	<.0001		<.0001	<.0001
CD4	0.69311	0.38390	0.74143	1.00000	0.73453
My organization has show to involve and support my long term career development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	<.0001	<.0001		<.0001
CD5	0.72335	0.43287	0.83694	0.73453	1.00000
I feel that my skills and expertise are put to their best use, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	<.0001	<.0001	<.0001	

Job Security

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Reliability Test (Job Security)

The CORR Procedure

5 Variables: JS1 JS2 JS3 JS4 JS5

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			Std				
Variable	**N**	**Mean**	**Dev**	**Sum**	**Minimum**	**Maximum**	**Label**
JS1	300	1.72667	1.03385	518.00000	1.00000	5.00000	My job is secure, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS2	300	1.79333	1.12614	538.00000	1.00000	5.00000	My work is reasonable, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS3	300	1.71667	1.24427	515.00000	1.00000	5.00000	I like to have long term relationship with my current company, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS4	300	2.10000	1.29186	630.00000	1.00000	5.00000	I feel secure even though my employment contract comes to the end, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS5	300	1.84333	0.95665	553.00000	1.00000	5.00000	I am satisfied with my salary, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Simple Statistics (table above)

Cronbach Coefficient Alpha

Variables	Alpha
Raw	0.900201
Standardized	0.905257

Cronbach Coefficient Alpha with Deleted Variable

	Raw Variables		Standardized Variables		
Deleted Variable	**Correlation with Total**	**Alpha**	**Correlation with Total**	**Alpha**	**Label**
JS1	0.710167	0.887428	0.709388	0.895396	My job is secure, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS2	0.797472	0.868330	0.799431	0.876243	My work is reasonable, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS3	0.859869	0.853022	0.868653	0.861006	I like to have long term relationship with my current company, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS4	0.634325	0.909002	0.633536	0.910958	I feel secure even though my employment contract comes to the end, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
JS5	0.807885	0.870971	0.807486	0.874493	I am satisfied with my salary, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Pearson Correlation Coefficients, N = 300
Prob > |r| under H0: Rho=0

	JS1	JS2	JS3	JS4	JS5
JS1	1.00000	0.62639	0.69096	0.53889	0.61935
My job is secure, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data		<.0001	<.0001	<.0001	<.0001
JS2	0.62639	1.00000	0.78630	0.57519	0.74286
My work is reasonable, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001		<.0001	<.0001	<.0001
JS3	0.69096	0.78630	1.00000	0.59402	0.84764
I like to have long term relationship with my current company, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001		<.0001	<.0001
JS4	0.53889	0.57519	0.59402	1.00000	0.54314
I feel secure even though my employment contract comes to the end, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001	<.0001		<.0001
JS5	0.61935	0.74286	0.84764	0.54314	1.00000
I am satisfied with my salary, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001	<.0001	<.0001	

Workplace Environment

Reliability Test (Workplace Environment)

The CORR Procedure

5 Variables: wk1 wk2(R) wk3(R) wk4 wk5

							Simple Statistics
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
wk1	300	1.58333	1.13166	475.00000	1.00000	5.00000	I feel comfortable to work in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk2(R)	300	1.73333	1.04844	520.00000	1.00000	5.00000	My workplace is stressful, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk3(R)	300	1.67667	1.24792	503.00000	1.00000	5.00000	I feel discrimination in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk4	300	2.07667	1.23932	623.00000	1.00000	5.00000	I received enough resources and facilities to my job properly, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk5	300	1.74000	1.10293	522.00000	1.00000	5.00000	Physical work condition is good, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Cronbach Coefficient Alpha	
Variables	Alpha
Raw	0.908634
Standardized	0.909540

Cronbach Coefficient Alpha with Deleted Variable

	Raw Variables		Standardized Variables		
Deleted Variable	Correlation with Total	Alpha	Correlation with Total	Alpha	Label
wk1	0.826773	0.876343	0.824148	0.878104	I feel comfortable to work in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk2(R)	0.675426	0.906811	0.675170	0.909043	My workplace is stressful, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk3(R)	0.803950	0.881134	0.806170	0.881944	I feel discrimination in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk4	0.724001	0.899021	0.724164	0.899087	I received enough resources and facilities to my job properly, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
wk5	0.829850	0.876241	0.828866	0.877092	Physical work condition is good, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Pearson Correlation Coefficients, N = 300
Prob > |r| under H0: Rho=0

	wk1	wk2(R)	wk3(R)	wk4	wk5
wk1	1.00000	0.58820	0.75211	0.70487	0.77573
I feel comfortable to work in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data		<.0001	<.0001	<.0001	<.0001
wk2(R)	0.58820	1.00000	0.64195	0.53830	0.62531
My workplace is stressful, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001		<.0001	<.0001	<.0001
wk3(R)	0.75211	0.64195	1.00000	0.61942	0.75760
I feel discrimination in my workplace, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	<.0001		<.0001	<.0001
wk4	0.70487	0.53830	0.61942	1.00000	0.67527
I received enough resources and facilities to my job properly, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	<.0001	<.0001		<.0001
wk5	0.77573	0.62531	0.75760	0.67527	1.00000
Physical work condition is good, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	<.0001	<.0001	<.0001	

Quality of Life

Reliability Test (Quality of Life)

The CORR Procedure

5 Variables: QF1 QF2 QF3 QF4 QF5

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
QF1	300	4.17333	1.06791	1252	1.00000	5.00000	I am more satisfied with foreign country as a living place when compared with my local area, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF2	300	3.93667	0.87667	1181	1.00000	5.00000	I feel more secure in foreign country when compared with Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF3	300	3.61333	1.51376	1084	1.00000	5.00000	I will leave my country if i can get better education opportunities for my children in other countries, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF4	300	3.91333	1.22372	1174	1.00000	5.00000	I believe that standards of living are better abroad, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF5	300	4.15667	1.06892	1247	1.00000	5.00000	I am intention to move to other country because of family related matters, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Cronbach Coefficient Alpha	
Variables	Alpha
Raw	0.830134
Standardized	0.855752

Cronbach Coefficient Alpha with Deleted Variable					
	Raw Variables		**Standardized Variables**		
Deleted Variable	Correlation with Total	Alpha	Correlation with Total	Alpha	Label
QF1	0.754364	0.763612	0.770702	0.799082	I am more satisfied with foreign country as a living place when compared with my local area, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF2	0.761400	0.775421	0.770004	0.799272	I feel more secure in foreign country when compared with Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF3	0.503719	0.853846	0.512483	0.865222	I will leave my country if i can get better education opportunities for my children in other countries, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF4	0.483516	0.837927	0.507735	0.866364	I believe that standards of living are better abroad, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
QF5	0.798479	0.751387	0.812034	0.787738	I am intention to move to other country because of family related matters, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Pearson Correlation Coefficients, N = 300 **Prob > |r| under H0: Rho=0**					
	QF1	QF2	QF3	QF4	QF5
QF1 I am more satisfied with foreign country as a living place when compared with my local area, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	1.00000	0.67980 <.0001	0.47193 <.0001	0.47220 <.0001	0.81115 <.0001
QF2 I feel more secure in foreign country when compared with Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.67980 <.0001	1.00000	0.48553 <.0001	0.54355 <.0001	0.72442 <.0001
QF3 I will leave my country if i can get better education opportunities for my children in other countries, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.47193 <.0001	0.48553 <.0001	1.00000	0.23462 <.0001	0.53776 <.0001
QF4 I believe that standards of living are better abroad, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.47220 <.0001	0.54355 <.0001	0.23462 <.0001	1.00000	0.46553 <.0001
QF5 I am intention to move to other country because of family related matters, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	0.81115 <.0001	0.72442 <.0001	0.53776 <.0001	0.46553 <.0001	1.00000

Brain Drain

Reliabilty Test (Brain Drain)

The CORR Procedure

5 Variables: BD1   BD2   BD3   BD4   BD5

Simple Statistics						
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
BD1	300	4.09667	1.03807	1229	1.00000	5.00000	I will consider to live in another country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD2	300	4.14000	0.90358	1242	1.00000	5.00000	I will willing to go if a job opportunity is available in foreign country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD3	300	4.16333	1.08655	1249	1.00000	5.00000	A stressful working environment will cause the employee to quit from a job, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD4	300	3.83333	1.12388	1150	1.00000	5.00000	I have family commitments that will eventually lead me back to Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD5	300	4.04333	1.00240	1213	1.00000	5.00000	I want to work abroad in the future, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Cronbach Coefficient Alpha	
Variables	Alpha
Raw	0.909140
Standardized	0.912381

Cronbach Coefficient Alpha with Deleted Variable					
	Raw Variables		Standardized Variables		
Deleted Variable	Correlation with Total	Alpha	Correlation with Total	Alpha	Label
BD1	0.770951	0.888729	0.769617	0.894278	I will consider to live in another country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD2	0.781987	0.888616	0.779913	0.892149	I will willing to go if a job opportunity is available in foreign country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD3	0.870864	0.866491	0.878359	0.871310	A stressful working environment will cause the employee to quit from a job, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD4	0.591629	0.928978	0.596516	0.928700	I have family commitments that will eventually lead me back to Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data
BD5	0.872845	0.867673	0.872353	0.872606	I want to work abroad in the future, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data

Pearson Correlation Coefficients, N = 300 Prob > |r| under H0: Rho=0	BD1	BD2	BD3	BD4	BD5
BD1	1.00000	0.59168	0.79249	0.49546	0.80271
I will consider to live in another country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data		<.0001	<.0001	<.0001	<.0001
BD2	0.59168	1.00000	0.79079	0.61587	0.71332
I will willing to go if a job opportunity is available in foreign country, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001		<.0001	<.0001	<.0001
BD3	0.79249	0.79079	1.00000	0.50166	0.89934
A stressful working environment will cause the employee to quit from a job, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001		<.0001	<.0001
BD4	0.49546	0.61587	0.50166	1.00000	0.55268
I have family commitments that will eventually lead me back to Malaysia, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001	<.0001		<.0001
BD5	0.80271	0.71332	0.89934	0.55268	1.00000
I want to work abroad in the future, 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree, 99=Missing Data	<.0001	<.0001	<.0001	<.0001	

APPENDIX 4.4: PEARSON CORRELATION COEFFICIENT

Career Development

Correlation Analysis

The CORR Procedure

2 Variables: Career Development Brain Drain

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
Career Development	300	1.83933	0.96156	551.80000	1.00000	4.60000	Career Development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
Brain Drain	300	4.05533	0.88526	1217	1.60000	5.00000	Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Pearson Correlation Coefficients, N = 300
Prob > |r| under H0: Rho=0

	Career Development	Brain Drain
Career Development	1.00000	-0.93374
Career Development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data		<.0001
Brain Drain	-0.93374	1.00000
Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	

Job Security

Correlation Analysis

The CORR Procedure

2 Variables: Job Security Brain Drain

Simple Statistics

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
Job Security	300	1.83600	0.96162	550.80000	1.00000	4.80000	Job Security, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
Brain Drain	300	4.05533	0.88526	1217	1.60000	5.00000	Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Pearson Correlation Coefficients, N = 300
Prob > |r| under H0: Rho=0

	Job Security	Brain Drain
Job Security	1.00000	-0.91476
Job Security, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data		<.0001
	-0.91476	1.00000
Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	

Workplace Environment

Correlation Analysis

The CORR Procedure

2 Variables: Workplace Environment Brain Drain

Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
Workplace Environment	300	1.76200	0.98986	528.60000	1.00000	5.00000	Workplace Environment, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
Brain Drain	300	4.05533	0.88526	1217	1.60000	5.00000	Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Pearson Correlation Coefficients, N = 300 Prob > |r| under H0: Rho=0	Workplace Environment	Brain Drain
Workplace Environment	1.00000	-0.91527
Workplace Environment, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data		<.0001
Brain Drain	-0.91527	1.00000
Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	

Quality of Life

Correlation Analysis

The CORR Procedure

2 Variables: Quality of Life Brain Drain

Simple Statistics							
Variable	N	Mean	Std Dev	Sum	Minimum	Maximum	Label
Quality of Life	300	3.95867	0.90256	1188	1.20000	5.00000	Quality of Life, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data
Brain Drain	300	4.05533	0.88526	1217	1.60000	5.00000	Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Pearson Correlation Coefficients, N = 300 Prob > |r| under H0: Rho=0	Quality of Life	Brain Drain
Quality of Life	1.00000	0.89496
Quality of Life, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data		<.0001
	0.89496	1.00000
Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	<.0001	

APPENDIX 4.5: MULTIPLE REGRESSION ANALYSIS

Linear Regression Results

The REG Procedure
Model: Linear_Regression_Model
Dependent Variable: Brain Drain Brain Drain, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data

Number of Observations Read	300
Number of Observations Used	300

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	214.23870	53.55968	786.75	<.0001
Error	295	20.08276	0.06808		
Corrected Total	299	234.32147			

Root MSE	0.26092	R-Square	0.9143
Dependent Mean	4.05533	Adj R-Sq	0.9131
Coeff Var	6.43390		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	4.09288	0.19095	21.43	<.0001
Career Development	Career Development, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	1	-0.34597	0.05162	-6.70	<.0001
Job Security	Job Security, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	1	-0.14435	0.04813	-3.00	0.0029
Workplace Environment	Workplace Environment, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	1	-0.15449	0.04634	-3.33	0.0010
Quality of Life	Quality of Life, 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree, 99=missing data	1	0.28698	0.03437	8.35	<.0001