

## **PARTICIPATION OF AGEING WORKERS AND THEIR PRODUCTIVITY IN MALAYSIA LABOUR MARKET**

Uma Murthy, Norehan Abdullah, Hussin Abdullah

### **ABSTRACT**

The present study examined the participation of aging workers and their productivity in Malaysian labour market. A quantitative research approach is employed following the positivist assumption with a realist ontology and objectivist epistemology. Data was collected using a probabilistic sampling method, particularly a stratified random sampling technique. A questioner was distributed among 200 aging workers. The targeted population was older workers in private education and medical industries aging 55-60 years. The findings indicate that age discrimination, older workers' intention to work after retirement, health status and education level influence participation of aging workers in Malaysia. Furthermore, few recommendations are put forward for employers to overcome these challenges.

**Keywords:** Ageing workers, older workers, labour market, health status and productivity

### **INTRODUCTION**

Aging worker is a global phenomenon, particularly in developed countries, such as USA, Japan and European countries. Aging problems can cause various social issues, such as shortage of workers in labour market and deficient performance (Angeloni and Borgonovi, 2016). The low fertility rate is one of the main factors causing aging problems in these countries (Gietel-Basten, Sobotka and Zeman, 2017). As a result, a decline in the proportion of young people has been observed in recent decades. Therefore, as many workers enter gradually into the retirement age, the shortage of young workers is becoming a social issue. As time passes, this issue hurdles the development and stability of the developed societies.

As a developing country, Malaysia faces brain drain issue, which is the large-scale movement of educated and skilled workers from developing to developed countries (Ibraheem and Devine, 2013). Since the support to aging people and fostering young generation require different social resources, the burden borne by society and government are also different. Medical expenses and social pension are the main items of expenditure for the aging people. They might be social burden after their retirement as they are supposed to leave their working post for younger employees relying on retirement pension. Thus, at this stage, idle aging workforce will be a waste of social resource. Like other developing societies, Malaysian society also faces discrimination and biasness against elderly people. They are perceived lacking an orientation towards flexibility, innovativeness, change (Kidwell, 2003) as well as less energetic (Kroll, 2003). The tendency among aging people to work after retirement also influences their participation in labour market.

However, some of them may not consider working after retirement due to the health issues and sufficient support from their families. As people get older, their body functions degenerate gradually, resulting in health problems and disease. Therefore, health becomes a main concern for aging people in both their life and work (Feldman, 1994). Some organizations may let their

employee retire earlier due to their unhealthy status. Thus, health is a very important factor that impact aging people's participation in their work. In this research, education level is also chosen as a factor that influence aging people's decision and participation in the labour market after retirement. Although their health condition may not allow them to work after retirement, but with a profound experience and education they still can make a contribution and create value for the society. The objectives of this paper are to examine the factors that contribution to participation of ageing workers in the labour market. Findings of the study are expected to help private and public companies and as well as policy-makers to design and implement more effective retention strategies for ageing workers in Malaysia.

## **LITERATURE REVIEW**

### **Age Discrimination**

Age discrimination is a social problem that has negative impact on older workers in workplace. Any differential treatment on the basis that an employee is "old" is considered age discrimination (Boone James, McKechnie, Swanberg, and Besen, 2013). It is defined as the rejection of an older worker due to an assumption about the effect of age on the worker's ability to perform, regardless of whether there was any factual basis for the assumptions (Sargeant, 2004). This is in fact a violation of the principle of equal treatment, where one person is treated less favourably than another in a comparable situation (Nygard and Snellman, 2014). Many companies have biases toward older workers and conceive the stereotypical image of older worker as less flexible, less motivated and less innovative than those younger counterparts (Peng and Kleiner, 1999). The employers consider usually old employees less productive, and it will cost much more to retrain those older employees as they avoid to accept novel changes. The problem with age discrimination can be very subtle (Ray and Kleiner, 2001). Tanja Rabl (2010) examined how age, perceived age discrimination and perceived organization support relate to each other and affect performance of employees. There are plenty of research studies that examined various aspects of age discrimination. In this paper, the researcher will study age discrimination as one of the factors influencing older worker's participation and their productivity in Malaysia's labour market.

**H 1:** Age discrimination has a positive influence on aging workers participation and their productivity in Malaysia labour market.

### **Intention To Work After Retirement**

This paper assumes aging workers' intention to work as an independent variable that influence their decision of participation in the labour market. The demonstration of this variable depends on the fact of retirement that relates to aging workers. As mentioned earlier, older workers physical condition will diminish, resulting in low productivity. As their age increases, work gradually becomes heavier for them and retirement is more desirable (Gustman and Steinmeier, 2014). Considering social equity and welfare for aging people, governments will regulate the retirement age of older employees in their countries. The mandatory retirement at some point, forces numerous capable employees to terminate their working career involuntarily, which is considered to serve as a constraint on those employees. Basically, retirement is a part of a company personnel policy where by the individual has to retire from the organization, usually with the receipt of a

company-sponsored pension (Gomez, Gunderson and Luchak, 2002). In the recent decades, under employment pressure, organizational and labour -market problems have often been solved by encouraging employees to retire before their statutory age (Zappala, Depolo, Fraccaroli, Guglielmi and Sarchielli, 2008). It can be seen that retirement is not only a personal issue, but also a matter of social concern. Some older employees choose to retire because retirement offer older workers the opportunity to escape unsatisfying situations at work (Henkens and Leenders, 2010). However, some of them prefer to work until the prescribed retirement date as they give high importance to work (Shacklock and Brunetto, 2011). Most of the previous studies considered workers' intention as a dependent variable. The present study deems it as an independent variable to aging workers' participation and productivity in Malaysia's labour market.

**H 2:** Intention to work after retirement has a positive influence on aging workers participation and their productivity in Malaysia labour market.

### **Health Issues**

Health is the main concern for aging workers. It not only affects the quality of aging workers life, but also their productivity in working place. Health is a very broad concept, which includes mild and moderate mental health issues as well as disability (Beck and Quinn, 2012). Basically, working and health have mutual effect on each other. On one hand, some work can cause health problems due to the problematic working environment, or the characteristics of the work. Particularly, jobs that require employees to perform physically activities will cause physical health problems for older employees (Peeters and Emmerik, 2008). When an employee is in poor health condition, he is more likely to absent from workplace and less efficiently in work. This may result in reduction in wages and rewards, which in return reduce employees' motivation in work. In a long run, it will have an adverse impact on their employability. Some researchers found that poor health increases the hazard rate of exit from full-time employment to non-employment by a factor of 2.5 and reduces the entry rate from non-employment to part-time and full-time employment by 57% and 72%, respectively (Blau and Gilleskie, 2015). Due to poor health statue, many older employees decide to retire early. Health problems can decrease labour productivity and weaken the position of older workers in employment (Legendre and Sabatier, 2014). Most of the literatures mainly discussed the relationship between health status of older employees and retirement, as well as the effect of employees' health status on employment. Nevertheless, in this research will study the impact of health status of older workers as an independent variable of their participation and productivity after their retirement in Malaysia's labour market.

**H 3:** Health issues has a positive influence on aging workers participation and their productivity in Malaysia labour market.

### **Education Level**

Education level is also a crucial factor of workers' employability. Education is designed to provide specified learning opportunities and is institutionalized, either as state institutions or as corporate ones (Olaniran and Agnello, 2008). Education level is determined by education length, which is the minimal time required to obtain a diploma and constructed from the highest education level achieved (Weber, 2014). In Malaysia, the government has been establishing an integrated education system for recent decades, however, as for older workers, most of them were not well

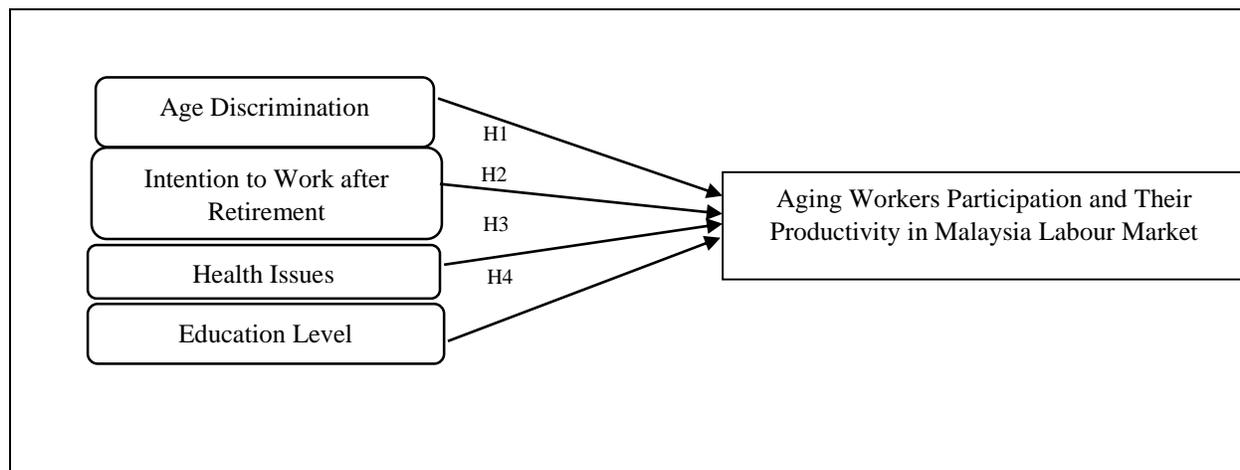
educated. Older workers which are most likely to be unemployed, are those with the least education and training (Van Horn, Krepcio and Heidkamp, 2015). Some jobs may be difficult for older workers to take. Occupations that are increasingly available in the labour market are mostly associated with professional skills and educational requirements (Bailey, 1993). Presently, with the advancement of technology, educational institution and society should cultivate more and more well-educated people. Thus, many people have the view that a low level of educational attainment may be an indicator of low capabilities (Spence, 1973). Less educated workers should invest more in technology specific skills, however, it may cause higher rates of human capital depreciation due to technological improvement (Gould, 2001). Moreover, according to Lebedinski and Vandenberghe (2014), marginal productivity of workers with a tertiary education is positively associated with overall labour productivity of a firm. High educated employees show efficiency in work and are more likely to achieve new tasks. The literature referred above studied the contribution of education in the employees' productivity in firm (Lebedinski and Vandenberghe, 2014). How employees' attributes and education involves in working to human capital practices in company (Wang, Caldwell and Yi, 2015). However, in this research will study the education factor whether contributing to their participation and productivity after their retirement in Malaysia's labour market.

**H 4:** Education level has a positive influence on aging workers participation and their productivity in Malaysia labour market.

### Proposed Framework

Relationship between the four factors and aging workers participation and their productivity are shown below:

**Figure 1. Research hypothesis**



## METHODOLOGY

### Measurement and Collection of Data

A quantitative research approach is employed in this research following the positivist assumption with a realist ontology and objectivist epistemology. Data was collected using a probabilistic sampling method, particularly a stratified random sampling technique. The structured survey questionnaire is divided into two sections; demography and scales of the four underlying factors of the research instrument, capturing four independent variables and 1 dependent variables. A 5-point Likert scale was used showing (1) “strongly disagree”, (2) “disagree”, (3) “slightly agree”, (4) “agree” and (5) “strongly agree”. The cronbach alphas of all 20 items in the scale shows 0.848, above and over 0.7 cut off threshold (Sekaran & Bougie) which suggest that the reliability of the scales for measuring standard of living, consumer income, economy of the country, bank interest rate and non-performing loan are considered acceptable (Sekaran & Bougie, 2010).

### Population and Sampling

Table 1 below captures the details of the adapted scales employed in this research. A questioner was distributed among 200 aging workers. The targeted population was older workers in education and medical industries aging 55-60 years.

## DATA ANALYSIS

Data analyses in the SPSS process that has been responded by 200 respondents. Pilot test is the first step to analyse the test to explore whether the items used based on the dependent variables and independent variables in the questionnaires are valid. Then, different tests will be used for numerous analyses such as multivariate analysis, correlation analysis, descriptive statistics, multiple linear regression, reliability statistics, correlation analysis for a better correlation, reduced significant value and positive relationship between ageing workers, age discrimination, health status, working after retirement and educational level.

### Correlation Analysis

Correlation analysis aims to examine a certain dependency relationship between the two variables. After that, the direction of their relation as well as the degree of the correlation is studied on basis of this dependency relation. This is a statistical method to study the correlation of the random variables.

**Table 1: Correlation Analysis**

		Ageing worker Participation	Age Discrimination	Older Worker's Intention To Work	Health Status	Education Level
Ageing workers Participation Pearson Correlation	1		.759**	.649**	.705**	.750**
Ageing Discrimination Pearson Correlation			1	.725**	.710**	.651**

Older Worker's Intention To Work Pearson Correlation	1	.749**	.627**
Health Status Pearson Correlation		1	.780**
Education Level Pearson Correlation			1

\*\*Correlation is significant at the 0.01 level (1-tailed)

In Table 1, shows that a positive and significant relationship exist between every variable. Based on above values, it can be observed that each variable is positively correlated with every other variable in the research as the correlation indices size of the above variables lies between 0.6 – 0.8.

**Table 2: Model Summary**

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.815	.664	.662		3.34022

a. Predictors: (Constant), Aging Workers Participation, Age Discrimination, Older Work Intention To Work, Health Status, Education Level

b. Dependent Variable: Ageing Workers Participation

**Table 3: ANOVA**

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	4359.459	1	4359.459	390.736	.000
Residual	2209.096	198	11.157		
Total	6568.555	199			

a. Dependent Variable: Ageing Workers Participation

b. Predictors: (Constant), Aging Workers Participation, Age Discrimination, Older Work Intention To Work, Health Status, Education Level

In Table 2, shows the entire summary of findings. R square shows the variation in aging worker's participation in labour market (dependent variable) due to influence of age discrimination, older workers' intention to work after retirement, health status and education level (independent variables). R square value is 0.662, which means that independent variables (age discrimination, older workers' intention to work after retirement, health status and education level) has 66.2% influence on dependent variable (aging worker's participation in labour market). Table 3 shows the level of significance whether it is acceptable or not. Results indicate that significant level is 0.000, which is less than 0.5. Thus, it is acceptable and shows strong impact of age discrimination, older workers' intention to work after retirement, health status and education level on aging worker's participation in labour market.

## HYPOTHESES RESULT

The research results support all of the four hypotheses. These hypotheses were tested through F value and T value. Hypotheses one shows that there is positive relation between age discrimination and aging workers' participation in Malaysian labour market. This research hypothesis was tested

through F value and T value. The F value has calculated as 390.736. This means that the researcher will accept the alternative hypotheses. The T value for the relation of the age discrimination and aging workers' participation in labour market is 2.107 with .000 significance. Therefore, this research hypothesis is accepted because the relation of variable is declared to be significant and positive in nature.

Hypotheses two shows that older workers' intention has positive relation to influence their participation in labour market. This research hypothesis was tested through F value and T value. The F value has calculated as 390.736. This means that the researcher will accept the alternative hypotheses. The T value for the relation of the older workers' intention to work after retirement and aging workers' participation in labour market is 2.100 with .000 significance. Therefore, this research hypothesis is accepted because the relation of variable is declared to be significant and positive in nature.

The hypotheses three shows that health status has a positive impact on aging workers' participation in labour market. This research hypothesis was tested through F value and T value. The F value has calculated as 390.736. This means that the researcher will accept the alternative hypothesis. The T value for the relation of the older workers' intention to work after retirement and aging workers' participation in labour market is 3.050 with .000 significance. Therefore, this research hypothesis is accepted because the relation of variable is declared to be significant and positive in nature.

The final hypotheses shows that there is a positive relation between education level and aging workers' participation in labour market. This research hypothesis was tested through F value and T value. The F value has calculated as 390.736. This means that the researcher will accept the alternative hypothesis. The T value for the relation of the older workers' intention to work after retirement and aging workers' participation in labour market is 2.234 with .000 significance. Therefore, this research hypothesis is accepted because the relation of variable is declared to be significant and positive in nature.

## **Results and Discussion**

As shown in table 4, a positive and significant relationship exists between every variable in this research. Based on values of Pearson Correlation shown in table, it is seen that each variable is positively correlated with every other variable in the research as the correlation indices size of the above variables lies between 0.6 - 0.8 and 0.8 – 1.0. Because of similar nature, the correlation of 'the aging workers' participation in labour market' with 'aging workers' participation in labour market' is 1. This means that a positive correlation exists between them. In addition, a positive correlation (.759) exists between 'aging workers' participation in labour market' and 'age discrimination' which is also significant at (0.000) level. Same result was obtained in the case of 'older workers' intention to work after retirement', a positive correlation (.649) exists, which is also significant at (0.000) level. As far as 'health status' and 'education level' is concerned, there is also positive correlation of (.705) and (.750) respectively, which is also significant at (0.000) level.

This research aims to explore the participation and contribution of aging workers in the labour market in Malaysia and to analyse what factors will influence their involvement. It is found that older workers' intention to work, age discrimination, health status and education level are the factors that affect the aging worker's participation and productivity in labour market. Results from

correlation, coefficient, linearity and other test show that these factors have a profound influence on productivity of aging workers in labour market. The results of this research will be helpful for the employers in structuring strategies to enhance the participation and productivity of aging workers. As mentioned earlier, the low rate of fertility is one of the main reasons for aging problems in emerging and developed economies that caused decline in the proportion of young workforce in the recent decades. To overcome this challenge, the employers should focus on developing effective strategies based on highlighted factors in this research to increase the productivity level of such workers.

On basis of the limitation mentioned in the previous section a number of recommendations can be made. In order to deal with the possibility of responses being generated in favour of old workers, future research should specifically target young workers in order to get their views regarding the productivity of aging work force in labour market. It is also suggested that in order to have more accurate result, the subject matter should be more dispersed and should cover wide area. The sample size must also be increased as well as the industry being covered.

## **CONCLUSION AND RECOMMENDATION FOR FUTURE RESEARCH**

It is conclude that productivity of aging workers in Malaysian labour market greatly depends on age discrimination, aging worker's intention to work after retirement, health status and education level. This research has indicated that a strong relationship exists between them. These variables determine the productivity of aging workers in labour market to great extent. As mentioned in the introduction, the low rate of fertility has caused decline in the proportion of young workforce in recent years. As a result, the number of aging workers has increased in the labour market. Aging people are valuable group of people in the society. Therefore, future research should specifically target young workers in order to get their views regarding the productivity of aging work force in labour market. For an accurate result, the subject matter should be more dispersed covering a larger sample size.

## **REFERENCES**

- Angeloni, S., & Borgonovi, E. (2016). An ageing world and the challenges for a model of sustainable social change. *Journal of Management Development*, 35(4), 464-485.
- Bailey, T (1993). *Organizational innovation in the apparel industry*. Industrial Relations, vol.32, no.1, pp. 30—48.
- Berangere Legendre & Mareva Sabatier (January 5, 2014). *The Puzzle of Older Workers' Employment: Distance to Retirement and Health Effects*. JEL Codes: I10, J26, J64.
- Boone James, J., McKechnie, S., Swanberg, J., & Besen, E. (2013). Exploring the workplace impact of intentional/unintentional age discrimination. *Journal of Managerial Psychology*, 28(7/8), 907-927.
- David M. Blau, Donna B. Gilleskie. (2015). *The effect of health on employment transitions of older men*. In Worker Wellbeing in a Changing Labour Market. Volume 20. Published online: 10 Mar 2015; 35-65.
- Feldman, D.C. (1994). *The decision to retire early: a review and conceptualization*. Academy of Management Review, Vol. 19, pp. 285-311.

**Vol. 16., No.1 (1-10), ISSN: 1823-884x**

- Gietel-Basten, S. T. U. A. R. T., Sobotka, T., & Zeman, K. (2017). Future fertility in low fertility countries. *World Population & Human Capital in the Twenty-First Century: An Overview*.
- Gould, E.D., Moav, O. and Weinberg, B.A. (2001), *Precautionary demand for education, inequality, and technological progress*. *Journal of Economic Growth*, Vol. 6 No. 4, pp. 285-315.
- Gustman & Thomas L. Steinmeier. (11 Nov, 2014) *Integrating Retirement Models: Understanding Household Retirement Decisions*. In *Factors Affecting Worker Well-being: The Impact of Change in the Labour Market*. Published online 79-112.
- Ibraheem, A. I., & Devine, C. (2013). Brain drain in African academic libraries: a survey. *Library Review*, 62(6/7), 362-374. Alan L.
- Kate Shacklock & Yvonne Brunetto, (2011). *A model of older workers' intentions to continue working*. *Personnel Review*, Vol. 40 Iss 2 pp. 252 – 274.
- Kène Hens & Monique Leenders, (2010). *Burnout and older workers' intentions to retire*. *International Journal of Manpower*, Vol. 31 Iss 3 pp. 306 – 321.
- Kidwell, R.E. Jr (2003). *Helping older workers cope with continuous quality improvement*. *Journal of Management Development*, Vol. 23 No. 10, pp. 890-905.
- Kroll, M. (2003). *The challenge of the age and competency structure in industry for innovations and human resource policy*. *Journal of European Industrial Training*, Vol. 27 No. 7, pp. 355-371.
- Lara Lebedinski Vincent Vandenberghe, (2014). *Assessing education's contribution to productivity using firm-level evidence*. *International Journal of Manpower*, Vol. 35 Iss 8 pp. 1116 – 1139.
- Nygård, M., & Snellman, F. (2014). The (non) politicisation of age discrimination in Finland and Sweden. *International journal of sociology and social policy*, 34(9/10), 694-709.
- Olaniran, B. A., & Agnello, M. F. (2008). Globalization, educational hegemony, and higher education. *Multicultural Education & Technology Journal*, 2(2), 68-86.
- Peng, B., & Kleiner, B. H. (1999). New developments in age discrimination. *Equal Opportunities International*, 18(2/3/4), 72-75.
- Rafael Gomez, Morley Gunderson & Andrew Luchak, (2002). *Mandatory retirement: a constraint in transitions to retirement?* *Employee Relations*, Vol. 24 Iss 4 pp. 403 – 422.
- Rocky Ray & Brian H. Kleiner, (2001). *How to investigate age discrimination complaints*. *International Journal of Sociology and Social Policy*, Vol. 21 Iss 8/9/10 pp. 53 – 58.
- Salvatore Zappalà, Marco Depolo, Franco Fraccaroli, Dina Guglielmi & Guido Sarchielli, (2008). *Postponing job retirement?* *Career Development International*, Vol. 13 Iss 2 pp. 150 – 167.
- Sargeant, M. (2004). Mandatory retirement age and age discrimination. *Employee Relations*, 26(2), 151-166. Maria C.W. Peeters Hetty van Emmerik, (2008). *An introduction to the work and well-being of older workers*, *Journal of Managerial Psychology*, Vol. 23 Iss 4 pp. 353 363.
- Sekaran, U., & Bougie, R. (2010). *Research Methods for Business*. New York: John Wiley & Sons Ltd.
- Spence, M. (1973). *Job Market Signalling*. *The Quarterly Journal of Economics* 87.
- Sylvain Weber (2014). *Human capital depreciation and education level*. *International Journal of Manpower*, Vol. 35 Iss 5 pp. 613 – 642.

**Vol. 16, No.1 (1-10), ISSN: 1823-884x**

- Tanja Rabl, (2010). *Age, discrimination, and achievement motives*. *Personnel Review*, Vol. 39 Iss 4 pp. 448 – 467.
- Van Horn, C. E., Krepcio, K., & Heidkamp, M. (2015). Improving education and training for olderworkers. *Washington: AARP Public Policy Institute, 2*.
- Vanessa Beck & Martin Quinn (2012). *Older and younger workers: the equalling effects of health*. *Education Training*, Vol. 54 Iss 7 pp. 592– 604.
- Wang, S., Caldwell, S. D., & Yi, X. (2015). The effects of education and allocentrism on organizational commitment in Chinese companies: A multi-level analysis. *International Journal of Manpower*, 36(5), 754-771.

## **ABOUT THE AUTHORS**

### **UMA MURTHY**

Pusat Pengajian Ekonomi, Kewangan Dan Perbankan  
Kolej Perniagaan, Universiti Utara Malaysia  
06010 Uum Sintok, Kedah, Malaysia  
[murthy.uma84@yahoo.com](mailto:murthy.uma84@yahoo.com)

### **NOREHAN ABDULLAH**

Pusat Pengajian Ekonomi, Kewangan dan Perbankan  
Kolej Perniagaan, Universiti Utara Malaysia  
06010 Uum Sintok, Kedah, Malaysia  
[norehan@uum.edu.my](mailto:norehan@uum.edu.my)

### **HUSSIN ABDULLAH**

Pusat Pengajian Ekonomi, Kewangan Dan Perbankan  
Kolej Perniagaan, Universiti Utara Malaysia  
06010 Uum Sintok, Kedah, Malaysia  
[hussin2141@uum.edu.my](mailto:hussin2141@uum.edu.my)