

# The Impacts of Increase in Retirement Age Towards Behaviour, Health and Productivity among Private Sector Workers Around Selangor

Dr. Mohd Ashraff Mohd Anuar

Department of Professional Development and Continuing Education Faculty of Educational Studies, Universiti Putra Malaysia

Tel: 03-97698234 E-mail: mohdashraff@upm.edu.my

Pravina Selvaraju (Corresponding Author)

Department of Professional Development And Continuing Education

Faculty of Educational Studies, Universiti Putra Malaysia

E-mail: gs66410@student.upm.edu.my

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#### **Abstract**

The objectives of the study are to identify behavioral changes such as low job satisfaction, increase in absenteeism, low motivation, changes in napping patterns and procrastinating work that accrued due to the increase in retirement age, to determine the level of health towards the increase in retirement age, to determine the level of productivity of workers towards an increase in retirement age and to determine the relationship between the impacts and increase in retirement age.119 individuals who are from private sectors in Selangor and above 50 years old are accepted as the respondents. The research design that has been chosen to conduct this study is descriptive and correlational research using a quantitative paradigm.

Keywords: retirement, productivity, health, motivation, retirement age



## 1. Background of the study

According to the Key Statistics of Labour Force in Malaysia, January 2021 which is officially released by Dato' Sri Dr. Mohd Uzir Mahidin, the Chief Statistician Malaysia Department Of Statistics, the total number of labour force in our country is 16.02 million which is increased from the year 2020 (15.99 million), the total number of employed from that population is 15.24 million meanwhile the unemployed are 782.5 thousand.

There is a need to earn money to fulfill their expenses, responsibilities and daily survival to pay for the food, rent, entertainment, family, utilities, wished materials and so on. Besides, people are also willing to work despite money as a reason. They work for independence where it leads them to control their lives on their own without depending on anyone in this world and have the courage to face the reality.

A desperate citizen from Kuala Lumpur, Malaysia, has written out his/her opinion that the life of a person after retirement is not that difficult to handle (The Star, 2021). The retirement age or more likely the ideal comfortable age to be retired is at 60. But, if we take the pandemic into account, the 60 is not convincing since it changes the entire equation of economics. The World Bank recently called to increase the retirement age to 65 with the consideration of the Malaysian government itself by noticing the troubles faced by the average earning working citizens in these most difficult days which worsening their living standards and also lead to traumas. The writer also expressed his/her hard feelings on the new scheme which was introduced by the Government called i-Sinar withdrawal. This initiative was taken by the government to overcome the financial issues by allowing the Employee Provident Fund (EPF) members to withdraw a certain amount from their savings which are supposed to be taken out only when they are officially retired.

Tharanya Arumugam (2021), a reporter from New Straits Times had highlighted the statement of Datuk Shamsuddin Bardan, the executive director of Malaysian Employers Federation (MEF) where the execution of such a policy of increasing the retirement age in our neighbourhood country, Singapore, will affect the labour market and increase in unemployment among the fresh graduates. The respectful Datuk also mentioned that the previous government act of increasing the retirement age from 55 to 60 which was implemented in July 2013 had caused side effects such as loss of million job opportunities to the younger generation.

In this current situation and taking every global issue into account, good health is not distributed equally among the people (Ilmakunnas 2, 2018), especially employees from the age group 50-65 years old who have worked hard and sacrificed their time and energy for years in a row. When they are channeling their contribution in work, their health level will be depleted year by year given attention, but the workers themselves are forcefully continuing their working and retire later due to the external factors such as Covid-19 pandemic, added responsibilities, unpaid loans, expenses and so on.

According to Grøgaard (2021), the author found that the elderly workers have lower individual productivity potential compared to the younger ones. Meaning, the older the



workers, the lesser the productivity will be. All of the impacts have correlated to the rise in the retirement age and that is the study is all about. The main purpose of this study to be conducted is to examine the relationship between the independent variables (IV) along with the dependent variable (DV). There are three independent variables which are behavioural changes of the workers (IV1) which will examine their satisfaction towards respective jobs and motivation level.

Besides that, worker's behavioural changes can be evident via their absenteeism due to low commitment level, low job satisfaction, changes in napping patterns and more likely to procrastinate as well.

As has been mentioned earlier, health (IV2) is one of the main factors to be counted. We can categorise health effects in two where mental and physical. Other than that, another impact which is equally crucial which will cause both workers and the organizations is the productivity level (IV3) of employees and employers. This study will test out the statement that older workers tend to be weaker than the younger ones, hence this study will observe their energy and contribution as well. Dependent variable which is the increase in retirement age will be drawn out the workers preferred age of their comfortable age to be retired and the level of willingness to how extended they are able to work.

## 2. Statement of problem

Previous studies such as by Dominique Anxo (2019), have not specified and classified the workers or also known as their respondents for the study according to full-time or part-time types. Plus, according to Dr Valerie Egdel et. al., (2017), even though the government sector is aware of the demographic changes but the effort of them to make the private sector to apply the policy is still limited to be tackled. Thus, this study will be fully conducted on full-time workers who are from the private sectors who are from both white and blue collar. This study also has suggested surveying and analysing the workers' attitude or more likely their behavioural changes that are affected by the expectancy of them staying in the labour market for a long period of time.

Additionally, Kosloski et al. (2001) cited by Patrick Pilipiec (2021), work satisfaction is a major factor of retirement decisions. As a result, it's critical to look at whether pension reforms with this goal are feasible to boost labour force participation while unintentionally lowering job satisfaction because decreased work satisfaction may lead to turnover of elderly employees' employees who have left the workforce (Ranu Sewdas et. al., 2017). Moreover, Vojtovič (2017) has also mentioned that information regarding the behavioural subject is not adequate enough to justify the retention of older workers which mean by the people who are nearing retirement. Thus, this study's IV1 is behavioural changes of the workers due to the increase in retirement age which will be focusing on their job satisfaction, motivation level, absenteeism and the commitment. N. Barban (2020) has agreed with the statement that there are positive effects of health in terms of mental and physical issues to an individual.

"The increase of retirement age and restrictions on early retirement plans locked older employees into the workplace with a negative impact on productivity" said Gabriele in his



study in the year 2018. Thus, this study's third IV is testing on workers' productivity which tends to be lower if the age is increased together considering their energy and contribution level.

Previous studies related to this research that have been conducted in a quantitative paradigm with multiple regression analysis is hardly to be found. Thus, this study will be tested and conducted in quantitative with multiple regression because this statistics analysis is able to identify the relationship between the IV (behavioural changes, health and productivity) and DV (increase in retirement age) well.

# 3. Objective(s) of the study

- I. To determine the level of behavioral changes, health, productivity of employees and increase in retirement age.
- II. To examine the relationship between the behavioural changes, health and productivity of employees and increase in retirement age.
- III. To identify the impact of behavioural changes, health and productivity among private sector employees towards increase in retirement age.

## 4. Hypothesis

# **Hypothesis 1:**

H1: There is a positive significant relationship between behavioural changes and increase in retirement age.

#### **Hypothesis 2:**

H2: There is a positive significant relationship between health and increase in retirement age.

## **Hypothesis 3:**

H3: There is a positive significant relationship between productivity level and increase in retirement age.

### 5. Definition of terms

## 5.1 DV: Increase in retirement age

Conceptual definition: According to Valery P. Chichkanov (2019), the increase in retirement age defined as the least difficult instrument that gives a more favourable adjustment between the number of working population and retired people. Such a degree may be a common reaction to the maturing of the populace and the related socio-economic and monetary issues.

Operational definition: In this study, the operationalized the older workers' willingness to continue their work by extending to be in the particular organization even after their "comfortable retirement age" exceeded.



## 5.2 IV 1: Behavioural change

Conceptual definition: According to Fatemeh Kimiyagahlam (2019), their past studies have stated that probability of a behaviour exists depending on the impacts of behavioural aspects on any individual to be anticipated in their behaviour. Also, researchers such as Prochaska & DiClemente (1986) and Rothman (2000) cited by Rebar (2021) where the changes in the person must be perceived as a long-term process which can be categorized into initial and maintenance stages.

Operational definition: In this study, operationalized behavioural changes definition that indicated the negative attitudes of employees who are about to retire. Behavioural changes can be measured by the level of job satisfaction and motivation of the elderly workers in the company.

#### 5.3 IV 2: Health

Conceptual definition: According to Richard Blundell et. al., (2020), health is referred to as a combination of the health index or more likely wellbeing refers to working capacity or health stock which is a comprehensive portrayal of wellbeing status that may be utilized in an assortment of settings and encourage comparisons over studies.

Operational definition: This study defining and measuring health in terms of physical constraints that have been faced by the private sector workers which are caused by the extension in their working span.

#### 5.4 IV 3: Productivity level

Conceptual definition: Productivity in work is the outcome that can be expected from an individual who performs several tasks that have been assigned based on the capability of his/her every day taking after the essential duties and capacities. Work productivity also is an accomplishment of completing the assignments and duties accordingly. (Murdifin et al., 2018 cited in Arfah, 2019).

Operational definition: In this study, productivity is defined as the worker's energy level and contributions towards their organization. Hereby, productivity of the elderly worker who are nearing their retirement age will be measured through their commitment levels that been contributing in their work.

## 2. Literature review

## 2.1 Increase in retirement age among private sector workers

As has been mentioned earlier, increasing the retirement age is a tool to be used as an adjustment between the number of working population and retired people. As in money nations, the action of altering the national pension program towards the raise in retirement age of workers, have been taken into consideration and about to implement as well (Valery P. Chichkanov et. al., 2019). Yuri Ì. Gorlin et. al., (2019) has stated that there are several examples regarding the process which have been postponed by the government due to pressures from the population, trade union and community experts and planned to execute the



plan in a more indulgent way.

Vojtovič (2017) cited from previous studies in theirs as "ageing of the population is a global demographic process, which is most prevalent in the developed countries (Kate, 2013; Lisiankova, Wright, 2009)"... A statement in a previous study by Vojtovič (2017) where workers who are aged 50 and over are affecting the labour market since they are categorized as the risk group in the employability. The justification is as follows.

As claimed by the employers (who have been surveyed by the researchers), aged employees or employees who are nearing their resting phase are unwilling to showcase their performance with a good number. On the other hand, aligning with Valery P. Chichkanov et. al., (2019) one of the findings shows that the unemployment in the labour market remains the same as even the increase in retirement age will delay some number of people's vacancy.

As per a support for the previous study, Dr Valerie Egdel et. al., (2017) have stated in their findings that, in spite of the fact that experts' perception on the aging population portrays the possibilities to affect the economy, employers appeared to show lesser concerns even though they are facing problems in terms of labour shortages, high turnovers of youthful aged bunches and having succession plans. The study also stated that 50% of companies would not think about recruiting employees who are 65 years and above, which was justified with negative stereotypes such as those groups of workers who tend to have lack of technological skills in their past experiences.

There are several factors pointed out by Ranu Sewdas et. al., (2017) which are the reasons for the aged group to stay in the workforce for a long term such as good health maintenance where some of the employees feel they will be fit enough if they are able to work regularly. Another study provides that increasing the retirement age, even just two years comparatively, causes three things which are labor supply, pension claiming, and retirement income (Rafael Lalive, 2017). On the other hand, even a majority of people, 72% showing positive attitude towards the increase in retirement age (JobStreet.com survey conducted on 3,485 people who are seeking jobs in Malaysia who are between 18 to 41 years old), Cheng, T. L. (n.d.) argued that there are room for consequences that might one could face due to that implementation.

The 38% respondents have agreed that retirement on the ideal age which is 60 years, 24% said 55 years, 15% preferred 65 years and lastly 55 years voted by 24% of people. There are several psychological effects of people who are about to retire as disclosed by Abdulrasaq Abdulkadir et. al., (2018), which are disbelief, anger at any injustice, anxiety which is the fear or worry, poor sleep and poor focus on something and stress which indicate the possibilities of elderly could face

## 2.2 Behavioural changes

Job satisfaction can be categorised as a positive or even a negative attitude of evaluating a person's job or it's situation (Weiss, 2002 cited by Eleanor M. M. Davies, 2017). High work fulfilment is accepted to be a valuable mental resource which impacts the desirability of development from the organization (Walk and Simon, 1958) and which a worker is unable to wish to give up through pronounced prior retirement. Explains that the elderly employees



who were valued by the company and highly satisfied with their job tend to prolong their employment and postponing their retirement.

These are the findings that tested on the employees who are aged 50 and above from the research as follows: Eleanor M. M. Davies (2017) stated that the higher household income is not the factor that influences the workers to do decision making in their intended retirement. Perhaps, the decision is mainly conceptualized from the job that explains who is very meaningful to them. Moreover, the elderly workers are who emphatically see forward to retirement report a prior aiming retirement age.

the retirement state of mind on aiming behaviour (Zappala et al., 2008; Davies and Cartwright, 2011; Cochran et al., 2012). Henning et al., (2021) found decreases in independent work inspiration some time recently retirement. The study also has stated that job satisfaction in the lives of elderly workers remains stable but there are mean level decreases nearing to their retirement phase. The nature of work might lose its importance once an individual plan for a new part of life which consists of various roles, opportunities, and obstacles (Henning, Lindwall, & Johansson, 2016).

A research by Piotrowska (2019) had disclosed regarding the behavioural changes in an individual's personal characteristics such as traits, delaying or more likely procrastinating, locus of control, negativity, compulsive buying, and time viewpoint. The study also revealed that procrastination is a very evident factor that mediates via personal characteristics and time which relies on retirement and planning for their savings as well. This will be channelized in their work as it starts to be delayed, procrastinating in submitting their assignments and making havoc in the working place (Hasnawia and Abbas, 2020).

According to Christine M. Harden et. al., (2019), a few have perceived and theorize that napping patterns may be a predominant behaviour, particularly in certain societies and with progressing age, however astoundingly small is known approximately the character and directions of resting behaviours in middle-aged and older adults.

#### 2.3 Health

As stated in Ludovico Carrino (2020) study, there are negative complications towards the employees' health which are evident in previous studies (Behncke, 2012; Bonsang, Adam, & Perelman, 2012; Mazzonna & Peracchi, 2017). In their discussion which conducted from their results where women are lower socioeconomic groups tend to be diagnosed with mental health more which their self-reported depression diagnosis shows inclining. Leaving elderly individuals out of the labour force as a result, the market may have an impact on the burden of mental illness (Will Maimaris, 2010).

No short-term impacts on mental health are seen, the findings suggest that the longer-term coefficients detect a negative effect of retirement on mental health rather than a reversion after favourable short-term effects. Models adding delayed mental health in the third panel corroborate this view, displaying almost equal, but somewhat more precise, longer-term estimates (Heller-Sahlgren, 2017). Bedaso and Han (2021) argued that their study shows comparatively, older workers who are not still working are more likely to be depressed than



elderly who are working. Meanwhile on the other hand, Zulkarnain and Rutledge (2018) stated in their finding that While the mortality impacts for men would predict that working longer would decrease the well-being of the analysed conditions, no critical relationship has been found in terms of discouragement or diabetes, both of the conditions examined here do not suggest that such conditions are reliable in reducing mortality.

The findings indicate that employees who have been working in a job that implies higher strain tend to have great mortality signs after their 65 compared to those who have been working with less strain (Macken, 2019). According to Marco Bertoni et. al., (2018), the retirement transition has a favourable, short-term muscular strength causative impact, early retirement has adverse effects on the long-term, accelerating the age of muscle strength decreases. In a study conducted by Leena Korpinen et. al., (2017) employees who are aged above 55 tend to have more physical constraints than the younger ones except symptoms in their neck.

## 2.4 Productivity

Interestingly, the productivity aspect is very much correlated with previous independent variables which are behavioural changes and health. Study by Putra and Arfah (2019) where Wellness, years of field experience, progress, age, number of employees, educational, income, workplace conditions and factors of government decisions are the deciding factors for productivity of female workers. A study by Roberto Gabriele et. al., (2018) have stated that, ageing is often a weak predictor of job performance in individuals and, slight decrease in capacity, there is possibility to maintain high productivity, specifically if an employer takes into account and capitalises on the diminishing skills of older workers.

According to Burtless (2013), historically, older employees have lower productivity and salaries than primary workers, however they are producing better than younger employees. An unresolved question is whether this historical link might impact the tendency towards subsequent retirement Significantly, whilst older employees are not engaged in proactively health care, they jeopardize it in good time, despite the benefits of proactive employment, quit employment or decrease their workability productively (Traci Carse et. al., 2017).

Wojciech Hardy et. al., (2018) have mentioned about the employment determinants among older employees from previous studies that have been cited accordingly. Because elderly employees are less productive, less physically adapted, more susceptible than younger workers to health issues, less reticent to contribute to training (Loretto & White, 2006). (Posthuma & Campion, 2009). Earlier employees are commonly discriminated against (Taylor & Walker, 2003) and are subject to harassment (Roscigno, Mong, Byron, & Tester, 2007), given the ongoing unfavourable perceptions about older workers (Henkens, 2005) even if they are mainly untruthful (Ng & Feldman, 2012).

# 3. Theoretical framework

## I. Behavioural changes

Theory of Planned Behaviour (TPB). Attitudes, Subjective Standards, and Perceived



Behavioural Controls were the three independent factors presented by the theory (PBC). Attitude toward conduct refers to a person's positive or negative feelings about engaging in that behaviour, as determined by behavioural beliefs about the conduct's outcome and evaluation of the outcome. The individual's perceptions of social pressure in doing or not performing a certain behaviour are determined by standardised beliefs that evaluate the social weights on the individual surrounding a particular conduct.

## II. Health and Productivity

According to Heller-Sahlgren (2017), in Grossman's (2000) human capital model, health serves as both a direct consumer good and an investment, since it is essential for people's well-being. Individuals must be in excellent health in order to work and raise their lifetime wages. The motivation to remain in excellent health for investment objectives is gone in retirement, but since retirees have more free time, the consumption value of health may rise. Finally, whether the total marginal value of health falls or rises after retirement determines the theoretical net effect, which is difficult to estimate. Theory states that human capital is a fundamental investment in enhancing productivity in work experience. Periodic rise in workers' pay depending on employee experience (Putra and Arfah, 2019).

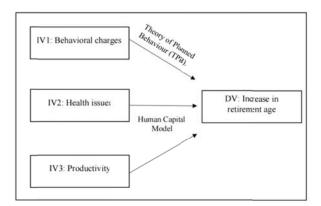


Figure 1. Illustration of theories which are correlated with independent variables and dependent variables



#### **Research Framework**

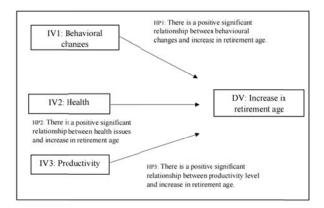


Figure 2. Pasteurization of the whole study

## 3.1 Research design

The research design that has been chosen to conduct this study is descriptive and correlational research using a quantitative paradigm. New methodological progress in modelling and statistical analysis system dynamics have created additional possibilities for using large quantitative data in response to today's challenges to develop exact models (Ghaffarzadegan and Xu, 2018). Since this study is intended to examine the relationship between the IVs and DV and determines the factors in IV as well, so both descriptive and correlational are apt and appropriate for this study. Descriptive research is described as a method of study used to as precisely as possible characterize existent phenomena (Atmowardoyo, 2018). Secondary data analysis which is a case study from previous research, pilot study and questionnaires through Google Forms are being used in terms of collecting and understanding the data for each variable.

## 3.2.1 Population

The population that is targeted for this study is blue and white collared workers who are aged more than 50 years which indicates the individuals are nearing retirement age. Those workers are from the private sectors and working full time since they are more likely to be expecting or waiting for their retirement phase. Both levels are management and operational workers because to differentiate their perspectives of increase in retirement age.

## 3.2.2 Unit of analysis

This study on the private sector employees and employers is a medium of guideline to serve the future which alias with the main objective where to examine the relationship between the impacts (independent variables) which are behavioural changes, health issues and productivity level along with the dependent variable which is the increase in retirement age among the private sector workers around Selangor, Malaysia.

## 3.2.3 Sample size determination

G\*Power application is being used to determine the sample size of this study. This application



is a recommendation by the previous researchers where it is a convenient and strong open-source medium that can tabulate the effective range size of tests and designs (Uttley, 2019). The population of the research which is private sector workers who are more than 50 years old (nearing retirement age) is determined by key in the input parameters as such: Effective size f<sup>2</sup> is 0.15, alpha (err prob) as 0.05, power (1- err prob) is 0.95 and number of predictors is 3 (behavioural changes, health issues and productivity). As an output parameter, the application was given the total sample size as 119.

## 3.2.4 Sampling

Probability sampling, which is simple random sampling, is chosen to collect data from the targeted population which is the private sector workers around Selangor, Malaysia. This randomization will help to reduce and avoid the biases factor while the study is conducted. Hereby, every respondent will be given the equal chances of being selected for the data collection.

## 3.7 Data Analysis

Using IBM SPSS, the data was analysed. Before beginning the parametric analysis, the normality test was employed to ensure that the data was normal. This study will employ two forms of statistical analysis, descriptive and inferential statistics, in order to achieve the research objectives.

Table 1 shows each objective and its statistical analysis.

No.	Objectives	Statistical analysis
1.	To determine the level of behavioural changes, health, productivity of employees and increase in retirement age.	Descriptive analysis
2.	To examine the relationship between the behavioural changes, health and productivity of employees and increase in retirement age.	Pearson's Correlation Coefficient Analysis
3.	To identify the impact of behavioural changes, health and productivity among private sector employees towards increase in retirement age.	Multiple Linear Regression Analysis

## 4. Results and discussion

4.1 Objective 1: To determine the level of behavioural changes, health, productivity of employees and increase in retirement age.



First objective of this study is to determine the level of all the dependent and independent variables which are behavioural changes, health, productivity of employees and increase in retirement age. The n value of the study is 119 respondents who are aged 50 years old and above from Selangor private sector fields. Levels were divided into three sections which are low, moderate and high. Since this objective will be tested using descriptive analysis, this required to generate the values of means, standard deviation, frequency and percentage will be reported

# Level of behavioural changes

Shows the level of behavioural changes of employees. This section of instruments consists of (6) which are closed-ended statements on a five-point Likert scale (Strongly agree, Agree. Neutral, Disagree and Strongly Disagree) and (Very satisfied, Satisfied, Neutral, Not satisfied and Not very satisfied). Items from the previous study (Georg Henning et. al., 2019). The mean score range is computed as 1.00-2.330 (low level), 2.331-3.660 (moderate level) and 3.661-5.00 (high level). The results show that 67.2% which is 80 respondents belong to a low level of behavioural changes meanwhile 32.8% which is 39 respondents indicate that medium level of behavioural changes. The findings also projected the overall mean value which is 2.09 and standard deviation is 0.53. As can be concluded from the computed result table, the level of behavioural changes of employees has fallen to a moderate level.

Level of behavioural changes	Frequency	Percent	Mean	Standard Deviation
Low level (1.00-2.330)	80	67.2	2.09	0.53
Moderate level (2.331-3.660)	39	32.8		
High level (3.661-5.00)	12.	<b>.</b>		

## Level of health

Shows the level of health of employees. There are 6 main items and subsequently asked about the frequency for related questions which can measure the health condition of the workers. The mean score range is computed as 1.00-2.330 (low level), 2.331-3.660 (moderate level) and 3.661-5.00 (high level).

The results show that 10.1% which is 12 respondents belong to a low level of health meanwhile 77.3% which is 92 respondents indicate medium level of health and lastly 12.6% which is 15 respondents indicates high level of health. The findings also projected the overall mean value which is 2.95 and standard deviation is 0.54. As can be concluded from the computed result table, the level of health of employees has fallen to a moderate

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Level of health	Frequency	Percent	Mean	Standard Deviation
Low level (1.00-2.330)	12	10.1	2.95	0.54
Moderate level (2.331-3.660)	92	77.3		
High level (3.661-5.00)	15	12.6		

## Level of productivity

Shows the level of productivity of employees. This section consists of (5) items which are closed-ended statements on a five-point Likert scale (1= Not really motivated, 2= Not motivated, 3= neutral, 4= Motivated, 5= Very much motivated) and (Strongly agree, Agree. Neutral, Disagree and Strongly Disagree). The mean score range is computed as 1.00-2.330 (low level), 2.331-3.660 (moderate level) and 3.661-5.00 (high level).

The results show that 16% which is 19 respondents belong to a low level of productivity meanwhile 79.8% which is 95 respondents indicate a medium level of productivity and lastly 4.2% which is 5 respondents indicates high level of productivity. The findings also projected the overall mean value which is 2.87 and standard deviation is 0.53. As can be concluded from the computed result table, the level of productivity of employees has fallen to a moderate level.

Level of productivity	Frequency	Percent	Mean	Standard Deviation
Low level (1.00-2.330)	19	16.0	2.87	0.53
Moderate level (2.331-3.660)	95	79.8		
High level (3.661-5.00)	5	4.2		

### Level of increase in retirement age

Shows the level of increase in retirement age. This section consists of (4) which are the first three items which are closed-ended statements on a five-point Likert scale (Strongly agree, Agree. Neutral, Disagree and Strongly Disagree). Questions were adapted from Davies, E., & Cartwright (2011). The mean score range is computed as 1.00-2.330 (low level), 2.331-3.660 (moderate level) and 3.661-5.00 (high level).



The results show that 19.3% which is 23 respondents belong to a low level of increase in retirement age meanwhile 47.1% which is 56 respondents indicate a medium level of increase in retirement age and lastly 33.6% which is 40 respondents indicates high level of increase in retirement age. The findings also projected the overall mean value which is 3.2 and standard deviation is 0.79. As can be concluded from the computed result table, the level of increase in retirement age of employees has fallen to a moderate level.

Level of increase in retirement age	Frequency	Percent	Mean	Standard Deviation
Low level (1.00-2.330)	23	19.3	3.2	0.79
Moderate level (2.331-3.660)	56	47.1		
High level (3.661-5.00)	40	33.6		

4.2 Objective 2: To examine the relationship between the behavioural changes, health and productivity of employees and increase in retirement age.

Objective number 2 is to examine the relationship between all the dependent and independent variables. This section, three hypotheses that have been created will be reviewed and validated according to the results that have been computed from the SPSS software. Pearson Correlation measurements have been used to examine the relationship between normally distributed random variables.

			Behavioural Changes Mean				Productivity Mean	
Increase in Retirement Age Mean	Pearson Correlat		.427**	261"	455"			
	Sig. tailed)	(1-	.000	.002	.000			

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (1-tailed).

## I. Hypothesis 1: Behavioural changes with increase in retirement age

H1: There is a positive significant relationship between behavioural changes and increase in retirement age.

Based on table, the significant value of behavioural changes of the employees is 0.000 meaning that the significant value is lower than the alpha value that was set which is 0.05.



Hereby, it indicates that there is a significant relationship between those two variables. The computed table also shows that the Pearson Correlation which is the r value is  $0.427^{**}$ . According to the Table which is Guildford's (1973) rule of thumb for interpretation of Pearson's correlation coefficient (r), the r value has moderate positive relationship. As a result, the relationship between behavioural changes and increase in retirement age is significant and positive. *H1* is supported.

## II. Hypothesis 2: Health with increase in retirement age

H2: There is a positive significant relationship between health and increase in retirement age.

Based on table, the significant value of health of the employees is 0.002 meaning that the significant value is lower than the alpha value that was set which is 0.05. Hereby, it indicates that there is a significant relationship between those two variables. The computed table also shows that the Pearson Correlation which is the r value is -

0.261\*\*. According to the Table which is Guildford's (1973) rule of thumb for interpretation of Pearson's correlation coefficient (r), the r value has low negative relationship. As a result, the relationship between health and increase in retirement age is significant and negative. *H2* is not supported.

# III. Hypothesis 3: Productivity with increase in retirement age

H3: There is a positive significant relationship between productivity level and increase in retirement age.

Based on table, the significant value of productivity of the employees is 0.000 meaning that the significant value is lower than the alpha value that was set which is 0.05. Hereby, it indicates that there is a significant relationship between those two variables. The computed table also shows that the Pearson Correlation which is the r value is -0.455\*\*. According to the Table which is Guildford's (1973) rule of thumb for interpretation of Pearson's correlation coefficient (r), the r value has moderate negative relationship. As a result, the relationship between productivity and increase in retirement age is significant and negative. *H3* is not supported.

4.3 Objective 3: To identify the impact of behavioural changes, health and productivity among private sector employees towards increase in retirement age.

The final objective of the study is to identify the impact of dependent and independent variables. This section of discussion will discover how the independent variables (behavioural changes, health and productivity) could influence or more likely impact the dependent variable (increase in retirement age) by using the Multiple Regression analysis.



			ANOVA			
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.612	3	7.204	15.744	.000 <sup>b</sup>
	Residual	52.622	115	.458		
	Total	74.234	118			
a. E	Dependent Variable	e: IncreaseRA	mean			
b. P	redictors: (Consta	nt), Productiv	ity mean, l	Health mean,	Behaviour	mean

The ANOVA model shows the significance of the study as a whole (research framework). The significant value of the model is 0.000 which is smaller than the alpha value of 0.05, hence the model is significant. Meaning that, the three independent variables of this study which are behavioural chances, health and productivity are influenced significantly towards the dependent variable which is increase in retirement age.

	Mode	1 Summary	Adjusted R
Model	R	R Square	Square
1	.540a	.291	.273
	s: (Constant), n, Behaviour_	Productivity_me mean	an,

Based on table, the R value indicates the multiple correlation coefficient and the R Square is Coefficient of Determination. 0.291% variance in DV has been explained by the three IVs of the study.



Variables	Sig.	Hypothesis	Hypothesis Result
Behavioural changes	r= 0.427** p= 0.000	H <sub>i</sub> : There is a positive significant relationship between behavioural changes and increase in retirement age.	hypothesis $H_{at}$ is supports
Health	r= 0.261- p= 0.002	H <sub>i</sub> : There is a positive significant relationship between health and increase in retirement age.	hypothesis $H_{\omega}$ is not supports
Productivity	r= -0.455** p= 0.000	H <sub>i</sub> : There is a positive significant relationship between productivity level and increase in retirement age.	hypothesis $H_{at}$ is not support

#### 5. Conclusion

In a nutshell, the researcher expected that the implication of increasing the retirement age will cause the employees behavioural changes, health and productivity. The researcher also hypothesizes that there will be a positive relationship between three independent variables which are behavioural changes, health and productivity and also one dependent variable which is increased retirement age. As a result, it is evident that only behavioural changes have a positive relationship while the other two variables which are health and productivity are negative relationships. Even though out of three variables, two contradict with researcher's expectation, it is still a strong stand that health is also a major aspect that needs to be given more attention by the employees who are aged 50 years and above. On the other hand, the organization and government should also reconsider increasing the retirement age of citizens to avoid possible consequences that one could face.

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