Article

A Study on Retirement Preparedness and Confidence among Private Sector Employees in Malaysia

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Abstract— **Retirement planning is particularly significant for an individual since it ensures that the individual's financial demands are met during the post-retirement period. A good plan prior to retirement is associated with significantly higher life satisfaction after retirement, given that many people spend a significant portion of their lives after a lengthy employment period. Personal retirement planning, on the other hand, is up to the individual. To ensure a comfortable retirement, employees must make a deliberate decision to set aside some of their earnings. However, past studies on retirement planning show that workers in Malaysia have made little or no preparation for their retirement. They only realize the need for retirement preparation when their savings are not enough to cover post-retirement expenses. Therefore, the main purpose of this study is to investigate the effects of attitudes towards retirement, goal clarity, social influence, and financial literacy on the preparedness and confidence of private sector employees in Malaysia. Aside from that, the study intends to compare employees' retirement preparedness and confidence by gender as well as age group. The data for this study was collected through the use of a questionnaire, which was completed via an online platform by 388 private sector employees in Malaysia, ranging in age from 21 to 60 years. The questionnaire was constructed into several sections, such as demographic profiles, attitude towards retirement, goal clarity, social influence, and financial literacy. The questions are on a 5-point Likert scale ranging from "strongly disagree" up to "strongly agree". This study used ordered probit regression to see the effect of the determinants on retirement preparedness and confidence. The results of the study showed that attitude towards retirement, goal clarity, social influence, and financial literacy have a significant positive effect on retirement preparedness and confidence. Apart from that, male employees are found to be more prepared and confident to retire compared to female employees. Finally, employees between the ages of 31 and 40 are the most prepared and confident in their ability to retire. The findings of the study have important implications for the retiring population, who should plan ahead of time so that they can survive throughout their retirement phase.**

Keywords— **retirement, attitude towards retirement, ordered probit model**

I. INTRODUCTION

The term retirement refers to when a person stops working permanently. In Malaysia, employees must retire when they reach the minimum retirement age that has been enforced, which is 60 years old [1]. This also applies to private sector employees who will begin retiring when they reach the age of 60, which is the minimum retirement age for them. When employees retire, their income will stop immediately after retirement, but their living expenses will still continue. The issue arises when some retirees return to work even after they have already retired, as their retirement benefits from their previous jobs are not enough to support their life. Thus, this kind of issue is worrying because retirees are supposed to enjoy their life after retirement and not work hard to cover their living expenses after they retire.

In this era, people will face many obstacles in their lives as they grow old, and this requires multiple adjustments, endurance, and flexibility in coping with the hard life, especially after retirement. One of the biggest changes for individuals as they get older is when they lose a job through retirement. The meaning of retirement itself varies according to the individual's point of view. Some people view retirement favorably and anticipate it with happiness, while others view it negatively, seeing it as a time of boredom, economic hardship, ill health, and death. In fact, whether in the public or private sector, retirement is a fixed end to which any worker must look forward [2].

Most countries have retirement schemes that differentiate between workers in the public and private sectors. The public pension scheme and The Employees Providence Fund (EPF) are the two most well-known retirement schemes in Malaysia. A public pension scheme is offered to public companies, while EPF is offered to both public and private companies. EPF will be the focus of this study because it is mostly offered to private-sector employees. Furthermore, more than half of Malaysia's overall labor force is made up of these employees. The EPF is a mandatory defined contribution savings plan in Malaysia, which involves contributions from both employees and employers. This plan ensures that employees will be financially self-sufficient after retirement. Furthermore, the Quran and other early Islamic writings provide the philosophical foundation for Islamic saving. The story of the prophet Yusuf preserving grain from abundant harvests in Egypt, as told in Surah Yusuf, chapter 12, verses 47 to 49 of the Quran, is often used as an example of prudent planning for difficult times. Thus, Islam advised us to always prepare for difficult times by putting money aside and building our wealth.

Many Malaysian private sector employees are not confident and are unprepared for retirement after the government decided to set the minimum retirement age at 60 years old. A private sector employee can continue to work even after they turn 60 years old, but it depends on the offer from the employer. If the employee chooses to retire late, it will require more time to contribute to EPF savings and will be a long-term plan. According to the president of the Life Insurance Association of Malaysia (LIAM), employees in their 20s are too young to be concerned about their retirement. In comparison, those in their 30s and 40s believe they are already prepared to retire because they have savings in EPF,

and those over 55 believe it is simply too late for them to do anything about their retirement [3].

In Malaysia, most retirees from the private sector depend solely on their EPF savings as their primary source of income after retirement. Retirees from the private sector get a lump sum of money after they retire, and the money will gradually be spent fully to cover their living expenses. Moreover, the share of the Malaysian population aged 65 and above is estimated to stand at 7% in the year 2020 [4]. Since the cost of living is rising and people are living longer, EPF contributions are no longer sufficient to ensure a comfortable retirement. This situation will become an issue if the employees do not begin planning for their retirement at an early stage.

Other than that, Malaysian private sector employees also lack awareness of retirement financial planning. Most of the employees are still holding on to "wait and see" behavior when there is a financial institution offering them various financial-saving products to encourage them to save for their retirement. Such behavior decreases the effort of financial institutions when the proportion of employees who plan to retire during pre-retirement is low. As a result, this type of behavior may also contribute to some socio-economic problems in our country, such as homeless, increasing crime rates and many more. According to Nurhisham Hussein, the head of the economics and capital market department at the EPF, the lack of retirement savings might be a result of workers' low financial literacy [5]. Therefore, Malaysians should be educated on the significance of retirement planning. If not, they could be running out of money in a couple of years after they retire.

Furthermore, there are not many previous studies that focused on the preparedness and confidence of Malaysian private sector employees facing retirement. For these reasons, the main objective of the study is to investigate the effects of attitudes towards retirement, goal clarity, social influence, and financial literacy on the preparedness and confidence for the retirement of private sector employees in Malaysia. The second objective is to compare the retirement preparedness and confidence of males and females among the employees. Lastly, the third objective of this study is to compare the employees' retirement preparedness and confidence based on their age group.

II. LITERATURE REVIEW

A. Theory of Planned Behaviour

Ajzen [6] proposed the theory of planned behaviour as an extension of the theory of reasoned behaviour, with the goal of forecasting and understanding the behaviour of human beings. The theory claims that the behavioural intentions of an individual are formed by three key components, which are attitude, subjective norms, and perceived behavioural control. A study in Rameli and Marimuthu [7] used this theory in conducting their study to investigate the effect of attitudes towards retirement on saving intentions and retirement planning behaviour. This theory can also be applied to the clarity of an individual's goals from the component of perceived behavioural control and social influence from subjective norms. Individual willingness to prepare for

retirement tends to improve when they exhibit positive behaviour.

B. Retirement Preparedness and Confidence

Retirement preparedness is a preliminary step in preparing for life after a paying job ends. Meanwhile, retirement confidence is described as the readiness and preparation to face retirement life without fear. Individuals who are satisfied with their retirement savings will result in higher retirement confidence. Furthermore, Malaysia is projected to have an aging population by 2030, but Malaysians are not prepared to face the future [8]. An aging population may be a problem as people will be living longer. Thus, all employees must be prepared financially to cover their living expenses after retirement as they live longer. Unfortunately, not everyone is prepared to retire since they do not have enough money to save [9]. Numerous prior studies on retirement preparedness have indicated that individuals around the world are either underprepared or completely unprepared for retirement. In most cases, a lack of retirement preparation can result in dissatisfaction during retirement, and yet retirement planning preparation is not an easy task.

C. Attitude Towards Retirement

Attitudes towards retirement can be described as individual acts in judging retirement. According to Kadir et al. [10], it was found that personal attitude plays a primary role in affecting retirement planning and is a useful indicator of increasing retirement confidence among working adults in Malaysia. Zonga [11] found that local government workers' attitudes towards retirement were generally positive, although they varied depending on demographic factors. A similar finding was achieved in another study in Hassan et al. [12], which found that an attitude toward retirement has a positive impact on retirement planning performance among employees in Malaysia. Individuals with a positive attitude towards retirement planning would be more assured in their ability to retire and live happier after retirement.

D. Goal Clarity

In terms of retirement, goal clarity can be defined as a clear aim or objective that an individual must have when preparing for retirement. A study by Hassan et al. [12] revealed that goal clarity was one of the positive factors that influenced retirement planning behaviour. Meanwhile, Shanmugam and Abidin [13] investigated the relationship between retirement confidence and preparedness, with the factors influencing it, and found that goal clarity is a significant variable that can influence retirement preparedness and confidence. Thus, goal clarity is proved to be one of the important factors in determining individuals' financial condition after retirement. Furthermore, individuals with positive goal clarity tend to be more optimistic when preparing for their retirement.

E. Social Influence

Social integration allows for the acquirement of information and the making of decisions within a society. Previous studies have suggested that individuals with outstanding social skills may have a tendency to devote more time to their future savings. A study by Beshears et al. [14] indicated that the presence of peer information could impact the decisions of working adults on retirement planning. Indeed, an individual can obtain information and experience from those who may impact their decisions. This result was aligned with a finding by Afthanorhan [15]. The result found that social influence has a significant impact on retirement planning. Thus, retired educators, counsellors, and financial professionals can discover a new way to influence people to save for retirement.

F. Financial Literacy

Financial literacy can be described as having the knowledge and abilities to make responsible financial decisions. Retirement preparedness and confidence should be carefully planned with good financial literacy. Financial literacy enables an individual to effectively manage their financial resources by applying appropriate knowledge and skills, especially in making rational financial and economic decisions. A study by Husin et al. [16] and Mustafa et al. [17] found that financial knowledge is the most significant variable compared to the other variables in the study. The result of the study showed that financial literacy was one of the determinants that influenced retirement planning. However, the study by Aluodi et al. [18] showed a different result. Financial literacy had no significant effect on retirement preparedness, even though the proportions of employees who planned for retirement varied dramatically across demographic factors. Financially literate individuals are more confident in their retirement planning because they understand the importance of accumulating wealth as a way of preparing for retirement.

G. Age

As an individual grows older, the tendency to gain more financial knowledge becomes higher, which helps with retirement planning. A study by Mansor et al. [19] showed that age has a significant impact on retirement planning. Age may also assist a worker who is preparing to retire by guiding them, changing their attitudes and perceptions about retirement, and increasing their retirement confidence. Meanwhile, a different result was obtained from the study in Talib and Manaf [20]. The result of the study revealed that age had no impact on retirement planning behavior. Therefore, it can be said from the result that there was no difference in retirement planning behavior between the age group of EPF workers.

H. Gender

Men and females think differently about every aspect of their lives. Many previous studies have looked at gender differences in retirement saving behaviour. It has been demonstrated in several previous studies that male employees are more proactive when it comes to retirement planning. A study by Fadila and Alam [21] showed that males had a higher mean score than females in adjustment to retirement, indicating that gender was a significant variable that affected the adjustment to retirement. The same results were obtained in Puteh et al. [22]. It was discovered that male employees were more financially prepared for retirement than female employees. Thus, from the study, it was revealed that there was a difference in retirement readiness between the gender groups.

I. Education Level

Some studies investigated the level of education as another crucial socio-demographic feature that is closely associated with retirement planning [19, 23]. A study by Mansor et al. [19] examined the effect of demographic variables on retirement planning and found that education level has a significant positive impact on retirement planning. The same result was obtained from the study by Juen and Sabri [23]. The education level is a key predictor of retirement confidence among female government employees in Peninsular Malaysia. Employees with lower education levels were unable to anticipate the major issues that might arise during the retirement period. As such, they will experience concern because of the uncertainty about the future, which will result in poor retirement confidence.

III. DATA AND METHODOLOGY

The following research framework in Figure 1 is developed with the goal of examining the impact of attitude towards retirement, goal clarity, social influence, and financial literacy on retirement preparedness and confidence among private sector employees in Malaysia.

Based on the reviewed articles, the Theory of Planned Behaviour (TPB) is proposed as the theory in this study. The above research framework outlines all the possible variables to evaluate retirement preparedness and confidence among private-sector employees in Malaysia. According to TPB, attitude towards retirement is represented by the proxy of attitude, the social influence for subjective norms, and perceived behavioural control is represented by goal clarity, respectively. Furthermore, an additional variable, financial literacy, is explored as a potential predictor of retirement preparedness and confidence in this research framework.
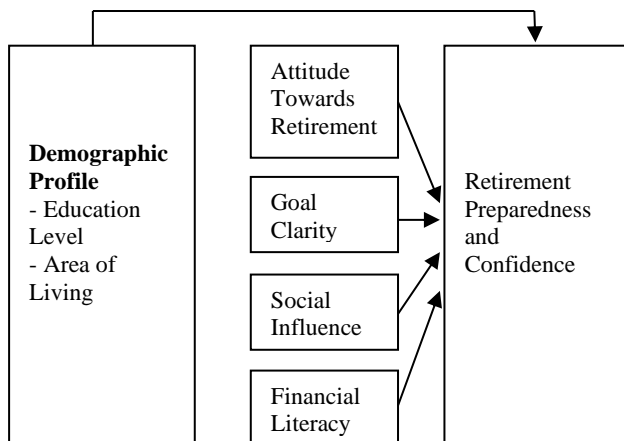
A. The Framework of the Study

Figure 1. A research framework

The demographic variables, which are educational level and area of living, served as control variables. It is a variable that is irrelevant to the study's main objective but is controlled since it has the potential to affect the outcomes. The education level has an impact on retirement preparedness and confidence since differing education levels cause people to think differently. Area of living also impacts retirement preparedness and confidence because rural and urban areas have different living expenses, which affect Malaysians to save for the future.

B. Data Collection

This study is cross-sectional design and was conducted using primary data to fulfill the objectives of the study. The sampling method used in this study is the purposive sampling method, as this study only involves private sector employees in Malaysia. This purposive sampling is non-probability sampling and was conducted due to the time-consuming and costly constraint the probability sampling is chosen [24]. Considering the population size of Malaysian citizens is 32.7 million with a 5% margin of error, the estimated sample size for this study would be 385 respondents, and we would target a maximum of around 400. Therefore, approximately 388 respondents from various demographic backgrounds were recruited for this study. For instance, out of 800 potential pool participants, only 388 participants filled in the questionnaires; hence, the response rate was 48.5%. These respondents are Malaysian residents working in private sector companies. The survey was done online, and the questionnaire was distributed using a Google link form to various social media networks.

This study used questionnaire-based surveys to discover the factors that influence the retirement preparedness and confidence of private sector employees in Malaysia and to determine which age group and gender are more prepared and confident for retirement. The questionnaires were created based on prior research [12-13, 17]. However, some of the questions have been adjusted to better meet the objectives of the study and ensure that respondents understand the questions better.

This questionnaire consists of three sections: Section A, Section B, and Section C. Section A includes several questions designed to collect socio-demographic information, such as age, gender, marital status, race, education level, monthly income, and area of living. Section B contains the questions used to assess retirement preparedness and confidence. Meanwhile, Section C contains the questions used to assess the study's independent variables, including attitudes toward retirement, goals clarity, social influence, and financial literacy. Section B and Section C employed a five-level Likert scale ranging from 1 to 5, or from strongly disagree to strongly agree, as the measure of response to these questions. Each of these sections' questions requires respondents to indicate their level of agreement with the statements made.

To prevent multiple responses from the same participants, the access restrictions of the link are given to the targeted participant. Then, to ensure the confidentiality of the information submitted, all of the respondents' data and information will be stored on a password-protected hard drive. Only the lead researcher and assistant researchers have access to this data, and only the lead researcher and assistant researchers have access to the password. The information gathered will be kept private and will not be shared on any platform.

C. Methodology

1) Pilot Test

The pilot test is conducted to check the reliability of each question in the survey. The data from 38 respondents were analyzed using Cronbach's alpha coefficient. Cronbach's alpha is conceptually a number that ranges from 0 to 1, with the value must be at least 0.7 for each question for the consistency of the question [25]. Therefore, the question that did not reach the 0.7 value of Cronbach's alpha score was removed from the survey, and the remaining questions proceeded in the study.

2) Multicollinearity Test

The presence of multicollinearity can lead to inaccurate results from the regression analysis. This study uses the variance inflation factor (VIF) to identify a multicollinearity problem. The VIF is a measure of how much the standard error of the coefficient estimate is inflated as a result of multicollinearity, and its value ranges from 1 to infinity. The VIF values of 1 indicate that the independent variables are not correlated with one another. In contrast, values of 1 to 5 indicate that the independent variables are moderately correlated, and values of 5 and above indicate that the independent variables are strongly correlated with one another.

3) Ordered Probit Model

The ordered probit model is regarded as the best model for analyzing survey data of Likert-scale items in the questionnaire. In addition, the probit regression model has the highest power compared to the nonparametric Wilcoxon test, independent t-test and ordinal logistic regression for all sample sizes and degree of skewness [26]. Furthermore, the findings for the dependent variable in this study are in a discrete and ordinal form, which is opposed to the more typical continuous form needed by a linear regression model. The variable has five categories: strongly disagree, disagree, neutral, agree, and strongly agree. The Ordered probit model ensures that the data is suitable while keeping the ordering of answer choices without assuming the interval distances between the options.

Based on an ordered probit model, the variable is measured on an ordinal scale ($y = 0,1,2,\ldots,j$). These numbers are not intervals in nature but rather represent a category of arbitrary width. A respondent's preparedness and confidence for retirement are assumed to be reflected by an underlying latent continuous variable, y^*. The model is expressed as the following equation:

$$y^* = \beta X + \varepsilon, \qquad (1)$$

where
- X = vector of independent variables
- β = vector of regression coefficients
- ε = unobserved error term

The relationship between the latent y^* and the observed y can be illustrated as below:

$$y = z \quad \text{if} \quad \mu_{z-1} \leq y^* < \mu_z \quad \text{with} \quad z = 1,2,3,4,5, \qquad (2)$$

where the μ_z's is assumed to be a function of cut-off points or threshold parameters, which are estimated along with the regression coefficients such that:

$$y = \begin{cases} 1 \to \text{strongly disagree} & \text{if} & \mu_0 = -\infty \leq y^* < \mu_1 \\ 2 \to \text{disagree} & \text{if} & \mu_1 \leq y^* < \mu_2 \\ 3 \to \text{neutral} & \text{if} & \mu_2 \leq y^* < \mu_3 \\ 4 \to \text{agree} & \text{if} & \mu_3 \leq y^* < \mu_4 \\ 5 \to \text{strongly agree} & \text{if} & \mu_4 \leq y^* < \mu_5 \end{cases} \quad (3)$$

The probability of private sector employees rating their agreement on retirement preparedness and confidence is illustrated as:

$$\begin{aligned} P(y=1) &= \Phi(\mu_1 - \beta X), \qquad (4) \\ P(y=2) &= \Phi(\mu_2 - \beta X) - \Phi(\mu_1 - \beta X), \\ P(y=3) &= \Phi(\mu_3 - \beta X) - \Phi(\mu_2 - \beta X), \\ P(y=4) &= \Phi(\mu_4 - \beta X) - \Phi(\mu_3 - \beta X), \\ P(y=5) &= 1 - \Phi(\mu_4 - \beta X). \end{aligned}$$

where Φ denotes the standard normal cumulative distribution function. The coefficients vector β and the coefficient μ_1, $\mu_2,\ldots,\mu_z$ are estimated using the maximum likelihood estimation of a sample to have consistent and efficient parameter estimates. The log-likelihood for this model is as follows:

$$\log(\beta, \mu | x_i, y_i) = \sum_{z=1}^{5} [= z] \log[\Phi(\mu_z - \beta X) \\ - \Phi(\mu_{z-1} - \beta X)], \qquad (5)$$

with $[y_i = z]$ is the Iverson bracket. It is equal to 1 if $y_i = z$, and 0 otherwise.

The ordered probit model for this study is as below:

$$y^* = \beta_0 + \beta_1 attitude + \beta_2 goal + \beta_3 social + \beta_4 literacy + \varepsilon, \qquad (6)$$

where
- attitude = attitude towards retirement
- goal = goal clarity
- social = social influence
- literacy = financial literacy

Since the model is an ordered probit model, ordinal regression analysis was used in this study to predict an ordinal dependent variable. The estimated coefficient value from the analysis determines whether the independent variable has a positive or negative impact on the dependent variable. The p-value measures the significance of the variable at a 5% level, and the value should be less than 0.05 to be considered significant. The analysis using this model was computed using STATA™ version 15 (StatCorp. 2017. Stata Statistical Software: Release 15. College Station, Texas: StataCorp LP).

4) Contingency Table

The contingency table is employed and created separately, one to compare retirement preparedness and confidence within the age group of the employees and the other to compare it within the gender. The age is classified in the 10-year age range group due to 21-30 for teenage/normal groups,

31-40 for adults, 41-50 for seniors and 51 and above for old citizens. This test is conducted to fulfill the second and third objectives of comparing the retirement preparedness and confidence of Malaysian private sector employees between age and gender groups.

The hypotheses of this test are:

H_0: Age is independent of retirement preparedness and confidence

H_a: Age is not independent of retirement preparedness and confidence

H_0: Gender is independent of retirement preparedness and confidence

H_a: Gender is not independent of retirement preparedness and confidence

The Chi-Square test was then performed to test the independence of the data in the contingency table. The formula to calculate the chi-square value is,

$$\chi^2 = \sum_{i=1}^{k} \sum_{j=1}^{m} \frac{(Observed_{ij} - Expected_{ij})}{Expected_{ij}}, \qquad (7)$$

where

k	: number of rows
m	: number of columns
$Observed_{ij}$	: observed cell count in the ith row and j^{th} column of the table.
$Expected_{ij}$	: expected cell count in the ith row and j^{th} column of the table. It can be calculated as the formula below:

$$Expected_{ij} = \frac{\text{Total Row } i \times \text{Total Column } j}{\text{Grand Total}} \qquad (8)$$

The calculated χ_2 value is then compared to the critical value from the χ_2 distribution table with degrees of freedom, df = (k-1)(m-1) and at a 5% significance level. If the calculated χ_2 value is greater than the critical χ_2 value, then the null hypothesis is rejected.

After testing for the independence of the data, the age and gender of respondents will be compared in terms of retirement preparedness and confidence using the data described in the contingency table. Calculating the conditional probabilities of two categorical variables from the table enables us to determine which category is more prepared and confident to retire from this table.

IV. RESULTS AND DISCUSSIONS

A. Pilot Study

Table I shows the results of the reliability analysis of four independent variables (attitude towards retirement, goal clarity, social influence, and financial literacy) and the dependent variable (retirement preparedness and confidence).

TABLE I. RELIABILITY ANALYSIS OF VARIABLES

Variables	Number of Items	Cronbach's Alpha (α)
Retirement Preparedness and Confidence	6	0.887
Attitude Towards Retirement	7	0.862
Goal Clarity	5	0.851
Social Influence	5	0.832
Financial Literacy	7	0.837

Based on the results above, it can be concluded that all of the Cronbach's Alpha, α values listed in the table are acceptable, with values ranging from 0.832 to 0.887. Furthermore, the reliability analysis reveals that no reliability problem occurs in the questions designed in the questionnaire as the figures have fulfilled the acceptable value of Cronbach's Alpha, which is greater than 0.7. Therefore, the questionnaire instrument is reliable for measuring all aspects consistently and free from random error.

B. Socio-demographic Profiles

An overall total of 388 responses were successfully obtained through the survey. Table II illustrates the information on the respondents' demographic profiles.

TABLE II. RESPONDENTS' DEMOGRAPHIC PROFILES

Characteristics	Categories	Frequency	Percentage (%)
Gender	Male	178	45.9
	Female	**210**	**54.1**
Age	**21 - 30 years old**	**231**	**59.5**
	31 - 40 years old	64	16.5
	41 - 50 years old	48	12.4
	51 - 60 years old	45	11.6
Marital Status	**Single**	**235**	**60.6**
	Married	153	39.4
Race	**Malay**	**177**	**45.6**
	Chinese	136	39.4
	Indian	72	18.6
	Others	3	0.8
Education Level	Sijil Pelajaran Malaysia (SPM)	53	13.7
	STPM / Matriculation / Diploma	57	14.7
	Bachelor's Degree	**176**	**45.4**
	Master's Degree	72	18.6
	Doctor of Philosophy (Ph.D)	30	7.7
Monthly Income	**RM 1,001 - RM 3,000**	**222**	**57.2**
	RM 3,001 - RM 5,000	84	21.6
	RM 5,001 - RM 7,000	45	11.6
	Above RM 7,000	37	9.5
Area of Living	**Urban**	**228**	**58.8**
	Rural	160	41.2

According to the results shown in Table II above, females constitute the vast majority of respondents, accounting for 54.1% of all respondents, as opposed to males, who account for 45.9% of all respondents. Following that, the majority of respondents (59.5%) were between the ages of 21 and 30 years old, followed by those between the ages of 31 and 40 years old (16.5%), 41 to 50 years old (12.4%), and those between the ages of 51 and 60 years old (11.6%). Besides, most of the respondents hold bachelor's degrees (45.4%), followed by master's degrees (18.6%), STPM/ matriculation/ diploma (14.7%), accompanied by Sijil Pelajaran Malaysia (13.7%), and the least of them holds Doctor of Philosophy (7.7%). In terms of marital status, 60.6% of the respondents were single, and 39.4% of the respondents were married. Among the three major races in Malaysia, Malay respondents made up the largest proportion, accounting for 45.6 percent of the total respondents, followed by Chinese respondents, who accounted for 39.4 percent, and Indian respondents, who accounted for 18.6 percent. Another 0.8% of the respondents are made up of other races. Other than that, most respondents in the sample study had a monthly income that ranged from RM 1,001 to RM 3,000 with 57.2%, followed by a monthly income of RM 3,001 to RM 5,000 (21.6%), RM 5,000 to RM 7,000 (11.6%), and the least was above RM 7,000, made up of 9.5% of total respondents. Lastly, the area of living of the majority of the respondents is urban, making up more than half of the total respondents with 58.8%, and the rest are in rural areas with 41.2%.

C. Multicollinearity Test Result

The results of the multicollinearity test for the independent variables are reported in Table III.

TABLE III. MULTICOLLINEARITY TEST RESULT

Model	Collinearity Statistics	
	Tolerance	VIF
Attitude Towards Retirement	0.525	1.903
Goal Clarity	0.441	2.265
Social Influence	0.641	1.561
Financial Literacy	0.568	1.761

The result showed that variance inflation factor (VIF) values for all independent variables are between 1 and 5, and the tolerance values are more than 0.2. This indicates that there was no multicollinearity problem occurred between the predictor variables. Thus, it can be claimed that each variable was not correlated to the other.

D. Ordered Probit Model Result

The results of the ordered probit regression and marginal effect are displayed in Table IV.

TABLE IV. ORDERED PROBIT REGRESSION AND MARGINAL EFFECTS RESULTS

Variable	Coef	95% CI of Coef	Marginal Effects				
			P(Y=1|X)	P(Y=2|X)	P(Y=3|X)	P(Y=4|X)	P(Y=5|X)
Attitude	**0.323*** **(0.072)** **[0.000]**	(0.183, 0.464)	-0.002 (0.001) [0.074]	**-0.028*** **(0.008)** **[0.000]**	**-0.065*** **(0.016)** **[0.000]**	-0.007 (0.009) [0.474]	**0.101*** **(0.023)** **[0.000]**
Goal Clarity	**0.404*** **(0.090)** **[0.000]**	(0.227, 0.581)	-0.002 (0.001) [0.074]	**-0.035*** **(0.009)** **[0.000]**	**-0.082*** **(0.020)** **[0.000]**	-0.008 (0.012) [0.472]	**0.127*** **(0.028)** **[0.000]**
Social Influence	**0.314*** **(0.061)** **[0.000]**	(0.195,0.433)	-0.002 (0.001) [0.074]	**-0.027*** **(0.007)** **[0.000]**	**-0.063*** **(0.014)** **[0.000]**	-0.007 (0.009) [0.474]	**0.098*** **(0.019)** **[0.000]**
Financial Literacy	**0.250*** **(0.086)** **[0.004]**	(-1.117,0.168)	-0.001 (0.001) [0.121]	**-0.021*** **(0.008)** **[0.009]**	**-0.050*** **(0.018)** **[0.004]**	-0.005 (0.008) [0.489]	**0.078*** **(0.027)** **[0.004]**
Log Likelihood	-390.0809						
R²	0.2722						

Note: * shows that the coefficients are statistically significant at a 5% significant level
The value given in square brackets is the p-value and in brackets is the standard error of the coefficient.
'1' represents strongly disagree, '2' represents disagree, '3' represents neutral, '4' represents agree, and '5' represents strongly agree.

All coefficients for the independent variables, which are attitude towards retirement, goal clarity, social influence, and financial literacy, are statistically significant. Thus, it is proven that they are important determinants of retirement preparedness and confidence.

All independent variables are positively related to retirement preparedness and confidence. It indicates that as the independent variables increase, they have a higher probability of being prepared and confident to retire. Based on the value of the coefficient, it shows that goal clarity has the highest coefficient with 0.4044, indicating the strongest relationship between retirement preparedness and the confidence of private sector employees in Malaysia. This

indicates that an employee who has a clear goal towards retirement is more likely to have an elevated level of retirement preparedness and confidence. It was followed by the variable of attitude towards retirement, social influence, and financial literacy with a value coefficient of 0.3232, 0.3142, and 0.25, respectively. Therefore, it is proven that attitudes toward retirement, goal clarity, social influence, and financial literacy do affect the retirement preparedness and confidence of private sector employees in Malaysia positively.

Following the estimation of the ordered probit model, the marginal effects were calculated to provide an overview of how the independent variables shift the probability of

statement agreement between the five ordinal levels. The probability of the responses "strongly disagree" and "agree" for all variables are insignificant to a 5% significant level based on the result in Table IV. The marginal effects of the variable attitude towards retirement have a positive significant relationship with retirement preparedness and confidence for the response 'strongly agree'. In contrast, it has a negative significant relationship with the responses 'disagree' and 'neutral'. It demonstrates that employees who have a positive attitude toward retirement have a 10.1 percent higher probability of strongly agreeing with the given statement. In comparison, the probability of responding 'disagree' and 'neutral' has decreased by 2.8 percent and 6.5 percent, respectively.

On the other hand, variable goal clarity has a positive significant relationship with retirement preparedness and confidence for the response 'strongly agree', which is more likely to increase by 12.7% while decreasing by 3.5% and 8.2%, respectively, as it has a negative significant relationship with the response 'disagree' and 'neutral'. Similarly, the probability of the response 'strongly agrees'

for the variable social influence increased by 9.8% as it has a positive sign, while the probability of the response 'disagrees' and 'neutral' showed a decrease of 2.7% and 6.3%, respectively.

Lastly, the variable financial literacy increases by 7.8% with the probability of the response 'strongly agree' while reduced by 2.1% with the probability of the response 'disagree' followed by 5.0% with the probability of the response 'neutral' accordingly. In accordance with the data presented in the table, it was demonstrated that all of the independent variables have a nearly zero percent probability of responding 'strongly disagree' or 'agree' for the given statement.

E. Contingency Table Result

The result for both contingency tables is displayed in Table VI and Table VIII, respectively.

1) Gender and Retirement Preparedness and Confidence

TABLE V. GENDER GROUP AND RETIREMENT PREPAREDNESS AND CONFIDENCE CONTINGENCY TABLE

		Retirement Preparedness and Confidence					Total
		Response					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Gender	Male	3 (1.7%)	19 (10.7%)	21 (11.8%)	57 (32.0%)	78 (43.8%)	178
	Female	8 (3.8%)	25 (11.9%)	44 (21.0%)	79 (37.6%)	54 (25.7%)	210
Total		11	44	65	136	132	388

TABLE VI. CHI-SQUARE TEST: GENDER AND RETIREMENT PREPAREDNESS AND CONFIDENCE

	Value	Degree of Freedom (df)	p-Value
Pearson Chi-Square	16.626	4	0.002*

Note: * significant at 5% significance level.

The computed Pearson Chi-Square, χ_2 value (χ_2=16.626) in Table VI is greater than the critical value (χ_2=0.711), so the null hypothesis of gender is independent of retirement preparedness, and confidence is rejected. Other than that, a p-value of 0.002 means that there is about a 0.2% risk of being mistaken in rejecting the null hypothesis. Thus, gender is not independent of retirement preparedness and confidence, or it depends on it.

From Table V above, 78 male employees strongly agree with the statement about retirement preparedness and confidence, with a percentage of 43.8% of the total respondents. In contrast, 54 (25.7%) of the respondents who strongly agree with the statement are female. This showed

that male employees are more prepared and confident to retire compared to females. In fact, males and females think differently about every aspect of their life, including retirement planning. This can be explained by differences in the socialization processes, cultural standards, and social roles of men and women, all of which contribute to our knowledge of gender differences. Males are more prepared and confident to retire because they are responsible for their family's living expenses, as males are the head of the family and the source of the family's income. On the other hand, females usually depend on their spouse's income, so they do not start preparing for retirement.

TABLE VII . AGE GROUP AND RETIREMENT PREPAREDNESS AND CONFIDENCE CONTINGENCY TABLE

		Retirement Preparedness and Confidence					Total
		Response					
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Age	21-30 years old	9 (3.9%)	23 (10.0%)	57 (24.7%)	97 (42.0%)	45 (19.5%)	231
	31-40 years old	1 (1.6%)	1 (1.6%)	2 (3.1%)	5 (7.8%)	55 (85.9%)	64
	41-50 years old	0 (0.0%)	1 (2.1%)	0 (0.0%)	21 (43.8%)	26 (54.2%)	48
	51-60 years old	1 (2.2%)	19 (42.2%)	6 (13.3%)	13 (28.9%)	6 (13.3%)	45
Total		11	44	65	136	132	388

TABLE VIII. CHI-SQUARE TEST: AGE AND RETIREMENT PREPAREDNESS AND CONFIDENCE OF INDEPENDENT

	Value	Degree of Freedom (df)	p-Value
Pearson Chi-Square	168.758	12	0.000*

Note: * significant at 5% significance level.

2) Age and Retirement Preparedness and Confidence

From Table VIII above, the computed Pearson Chi-Square, χ^2 value (χ^2=168.758) is greater than the critical value (χ^2=5.266). So, the null hypothesis of age being independent of retirement preparedness and confidence is rejected. A p-value of 0.000 indicates that there is about a 0% risk of being mistaken in rejecting the null hypothesis. In other words, it means that there is a 100% relationship between age group and retirement preparedness and confidence. Thus, age is not independent of retirement preparedness and confidence or depends on it.

From Table VII above, it can be said that the employees in the age group of 31-40 years old are the most prepared and confident to retire. There are 55 (85.9%) employees aged between 31 and 40 years old who strongly agree with the statement of retirement preparedness and confidence. It was followed by employees aged between 41 to 50 years old, 21 to 30 years old, and 51 to 60 years old who strongly agreed with the statement of retirement preparedness and confidence with a percentage of 54.2%, 19.5%, and 13.3%, respectively. Employees aged between 31 to 40 years old are mature enough to prepare and confidently retire, and they also have a long time to prepare before they retire. If they choose to prepare early, their life after retirement will be more guaranteed.

The least prepared and confident to retire are the employees in the age group of 21 to 30 years old, with a percentage of 3.9%, and 9 employees strongly disagree with retirement preparedness and confidence. It was followed by the employees who were aged between 51 to 60 years old, 31 to 40 years old, and 41 to 50 years old, with a percentage of 2.2%, 1.6%, and 0%, respectively. Employees aged between 21 to 30 years old do not think about preparation to retire, and they think that the process is too long. They also believe that they are still young and want to enjoy life to the fullest. Most of the employees in this age group are single and have not married yet, so they do not have any responsibility for the family.

F. Discussion of Findings

Attitude towards retirement has resulted in positively affecting retirement preparedness and confidence. The results of the study coincide with several previous studies that were conducted by [10], [11], and [12]. Employees with a positive attitude towards retirement planning will be more assured in their ability to retire and live a happier life after retirement.

Employees with positive goal clarity tend to be more optimistic when preparing for their retirement. Thus, this statement is supported by the findings in this study that goal clarity has a significant positive impact on retirement preparedness and confidence. Furthermore, previous studies have emphasized the same result as shown in the studies conducted by [12] and [13]. Therefore, when it comes to planning for retirement, private sector workers in Malaysia should have a specific goal in mind, which will help them become wise and prepared for the inevitable shift into retirement.

Apart from that, it was discovered in the study that social influence has a significant positive impact on retirement preparedness and confidence. The same result was also found in previous studies by [14] and [15], where they found that social influence is a significant determinant in retirement planning. Therefore, employees who are sociable will tend to be more prepared and confident in their decision to retire because their decision on retirement planning will be more influenced by others.

Employees with high financial literacy will be more prepared and confident to retire. The study found that financial literacy has a significant positive impact on retirement preparedness and confidence. Previous studies conducted by [16] and [17] have found the same result. Thus, it is essential for private sector employees to have the good financial knowledge to manage their personal finances and plan for retirement.

Indeed, males and females approach every element of life differently, including retirement planning. This present study found that male employees are more prepared and confident to retire compared to females. Authors in [21] and [22] reported the same outcome in their studies, which is that male employees were more financially prepared for retirement than female employees. This could be explained by the fact that men

and women have different socialization processes, cultural standards, and social roles, all of which contribute to our understanding of gender differences.

Finally, the study revealed that employees aged between 31 to 40 years old are the most prepared and confident to retire, and the least one is aged between 21 to 30 years old. A previous study conducted by [19] found that age has a significant impact on retirement planning. Basically, an individual tends to gain more financial knowledge, which helps with retirement planning as they grow older. Employees between the ages of 31 and 40 are mature enough to think about retirement and have plenty of time to save or invest. In contrast, employees between the ages of 21 and 30 believe that it is too early for them to consider retirement planning. That is why they have different levels of retirement preparedness and confidence.

IV. CONCLUSION AND RECOMMENDATION

This study aims to investigate the effects of attitude towards retirement, goal clarity, social influence, and financial literacy on retirement preparedness and confidence of private sector employees in Malaysia. A comparison of preparedness and confidence for retirement by age group and gender is also being sought as part of the study. The study findings revealed that all the independent variables in the study, which are attitude towards retirement, goal clarity, social influence, and financial literacy, have a positive significant impact on retirement preparedness and confidence. Male employees are more prepared and confident to retire compared to female employees. Employees who are between the ages of 31 to 40 are the most prepared and confident to retire, while those in their early twenties are among the least prepared and confident to retire.

Employees in the private sector planning their retirement could benefit from the study's findings. They will see how important it is to be well-prepared for retirement and to have a solid sense of self-assurance in their retirement planning decisions. To ensure a financially secure retirement, employees are urged to begin planning early. Besides, future researchers will be able to use the study's findings to better understand how pre-retirees approach retirement and to generate new retirement planning determinants for future research. Furthermore, the findings of the study are sufficient to assist policymakers, banks, and other financial institutions in meeting the demands of the market for their products and services. Policymakers can remodel their products according to the preferences of private sector employees in Malaysia. The products that the insurance company offers may attract young employees aged 21 to 30 years old to prepare for their retirement earlier.

A bigger sample size of respondents is recommended for further research to adequately represent the overall phenomenon of retirement preparedness and confidence among Malaysian private sector employees and to give more reliable outcomes. Additionally, there are many other factors that can be studied to determine which factors have the greatest impact on Malaysian employees' retirement preparedness and confidence so that the employees can change their behaviour to ensure their living after retirement.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this paper.

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