

# Retirement Planning among Female Workforce in Malaysia and China

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## Abstract

A phenomenon has emerged whereby the life expectancy of women is 74.2 years, and men's is 69.8 years. Hence, it is crucial to encourage early retirement planning among women. This study aims to explore the factors that influence retirement planning awareness and readiness among women in Malaysia and China. A self-administered online questionnaire was completed by 100 Malaysians and 200 Chinese. Using IBM SPSS and SmartPLS, the determinants examined the moderating effect of self-efficacy towards retirement readiness. This study will provide valuable insights for policymakers to adopt better strategies to address women's issues and improve their quality of life.

Keywords: Female Retirement Planning; Comparing Malaysia and China; Gender Equality; Quality of Life

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## 1.0 Introduction

According to the World Social Report 2023, there will be 16 billion people aged 65 and above in the world in 2050, compared to 7.61 billion people in 2021. According to World Health Statistics (2019), the life expectancy of women is 74.2 years, and that of men is 69.8 years. It increased by approximately 7 to 8 ages from 73.33 to 80.88 female average life expectancy from 2000 to 2020 respectively in China. On the other hand, it also showed the statistics of an increase of 3 ages compared to the female average life expectancy of 75 age in 2000 to 78 in 2020 in Malaysia (World Population Prospects, 2021). Hence, it is significant to have early retirement planning for women at their earliest. In China, there is a dramatic increase of working women spending much time at their work and that brings a phenomenon where women do not dare to have children. This will definitely create a social issue sooner or later. Besides, a study conducted by Ferry (2016) stated that across the largest 100 companies among 10 Asia Pacific countries, including Malaysia, those companies who have at least 10% of female board representation scored a higher return, i.e., as measured by return on equity (ROE) of 14.9%, than companies just 12.6% for those with less than 10% female board representation. Hofstede et al. (2010) also mentioned that, on average, people from China practice more masculine values than Malaysian people and belong to highly masculine countries. Under the high masculine, women exist in society, which reflects many unfair aspects. For example, the issue will be the female income, the female status, and the female job opportunities, and all of these make it clear that the problem of female pension is more prominent; the question which arises is: Do these women have the intentions to plan their life? Is there a lack of knowledge of finances that affects women? Do the local women who live in Malaysia have better retirement planning than the women who live in China or vice versa?

### Study objectives

This study aims to explore the factors of retirement planning awareness and readiness among women in Malaysia and China. The first point is to investigate the relationship between financial risk tolerance towards retirement planning awareness and readiness. The second point is to examine the relationship between financial literacy towards retirement planning awareness and readiness. The third point is to investigate the relationship between future timely planning towards retirement planning awareness and readiness. The fourth point is to investigate whether there is a moderating effect of financial self-efficacy on financial risk tolerance towards retirement planning awareness and readiness. Fifth point is to investigate whether there is a moderating effect of financial self-efficacy on financial literacy towards retirement planning awareness and readiness sixth point is to investigate whether there is a moderating effect of financial self-efficacy on future timely planning towards retirement planning awareness and readiness. Besides, the moderating effect of self-efficacy towards retirement readily will also be examined. This study is in line with sustainable development goals 3 and 5. the goal 3 is good health and being, the new goal for worldwide good health promotes healthy lifestyles, preventive measures, and modern, efficient healthcare for everyone, ensure healthy lives and promote

well-being for all at all ages. Goal 5, gender equality, is woven throughout the SDGS as it intersects economic, social, and environmental issues. It has its own goal, SDGS 5—with the ambition of achieving gender equality and empowering all women and girls and is mentioned explicitly in 10 of the other goals. Humanity should come together to address today's inequalities, address the challenges of population ageing, and take advantage of the opportunities it presents for the benefit of future generations (world social report, 2023). This study will be able to provide input for the better adoption of women's issues by the government. It is also to help women have a quality of life in society and make a promotion of fertility.

## **2.0 Literature Review**

In Malaysia, this study discovered retirement awareness among the working population below 40 in Malaysia. Based on this study, research has shown that retirement confidence, sources of retirement information, and financial literacy and knowledge among the young working population directly influence retirement awareness. (Auni & Salina, 2021) Though ample empirical evidence demonstrates the relationship between objective financial literacy and retirement planning, we have a limited understanding of the role of individuals' subjective financial literacy in their retirement planning. In this study, we examine how individuals' financial literacy confidence bias affects their Retirement Planning Awareness and Readiness behaviours using survey data in China. Based on the difference between respondents' subjective and objective financial literacy from survey data, we construct measures of individuals' financial literacy overconfidence and underconfidence for empirical analysis. Our results document the critical role of individuals' assessment of financial literacy in their retirement planning. We find that individuals' financial literacy overconfidence (underconfidence) significantly promotes (demotes) their retirement planning behaviours in China (Chen & Chen, 2023). Retirement and financial planning studies have mainly been conducted in developed countries, especially the USA and Australia. In contrast, research investigating the predictors of financial preparedness for retirement in emerging countries remains scarce (Kumar et al., 2019). Studies have shown that individuals do not engage in sufficient planning for retirement because of a lack of domain-specific knowledge (Hershey et al., 2010; Larisa et al., 2020).

## **2.1 Theory**

In this study, Gender Theory is mentioned by this study, Orientation was first proposed by the American anthropologist Geruben in 2009, and its proposition plays had a significant impact in advancing the investigation of ladies in the West. The term orientation is utilized to allude to the comprehension of the distinctions among people framed by friendly culture, as well as the social culture. The qualities and ways of behaving at gatherings having a place with ladies or men shaped the general public.

The orientation hypothesis examines the pith and wellspring of orientation imbalance in human culture. The hypothesis holds that the orientation jobs accepted by people are still up in the air by science, however predominantly, It is obtained and shaped under friendly and social imperatives; the jobs and status of people in the public arena, society's assumptions and assessments of orientation jobs (like men's prevalence and mediocrity of ladies, unrivalled men and sub-par ladies), generalizations and conclusions about orientation. Social familiarity with distinctions in sexual orientation, and so forth, is even more mostly a result of society. (Tripp & Munson, 2022) link experiences of visibility, invisibility, and hypervisibility with ideological variation regarding the significance of physiological, linguistic, and social features, concluding that gender ideologies are implicated both in linguistic processing and in social judgments of value between groups. Thus, the study of female behaviour is significant.

The theory of planned behaviour: (Ajzen, 1991) determined that the theory of planned behaviour is found to be well supported by empirical evidence in broad terms. Moreover, they discovered intentions to perform behaviours of different kinds can be predicted with high accuracy from attitudes toward the behaviour, subjective norms, and perceived behavioural control, and these intentions, together with perceptions of behavioural control, account for considerable variance in actual behaviour. Attitudes, subjective norms, and perceived behavioural control are shown to be related to appropriate sets of salient behavioural, normative, and control beliefs about the behaviour, but the exact nature of these relations is still uncertain. explored the planning behaviour, attitudes and behaviour of investment with regard to retirement planning awareness and readiness. However, (Ajzen, 2020) determine a brief description of the theory and discusses a number of issues and questions that have been raised with respect to the TPB. Among the issues discussed are the difference between the TPB and the theory of reasoned action, perceived behavioural control versus self-efficacy, the difference between perceived behavioural control and locus of control, the possibility of including additional predictors in the TPB, nonavailability of a standard TPB questionnaire, predicting behaviour in a choice situation, the intention-behaviour gap, and a comparison of the technology acceptance model to the TPB. TPB will use in the study to investigate the retirement planning awareness and readiness.

## **2.2 Financial Risk Tolerance**

Financial risk tolerance is a person's willingness to take financial risks. Previous research has shown that financial risk tolerance is a crucial factor that affects retirement planning behaviour, and it moderates the relationship between various financial factors and retirement planning behaviour. Bapat (2020) found that financial risk tolerance significantly affects the relationship between financial knowledge, financial attitude, and internal locus of control with financial management behaviour. Harahap et al. (2022) established that financial literacy in retirement planning is serially mediated by financial risk tolerance and saving behaviour. Alkhawaja and Albaity (2022) discovered that financial risk tolerance had an insignificant negative effect on retirement saving behaviour in the United Arab Emirates,

while Husna et al. (2023) found a positive and significant effect on retirement budget. As financial risk tolerance has been shown to play a significant role in retirement planning behaviour, it is essential to investigate its potential impact on retirement planning awareness and readiness among women. Thus, we propose the following hypothesis:

H1. There is a significant relationship between financial risk tolerance and retirement planning awareness and readiness among women in Malaysia and China.

### **2.3 Financial Literacy**

Financial literacy refers to an individual's ability to comprehend how money operates in the world, including how people obtain or generate it, how it is managed, how it can be invested to yield profits, and how it can be contributed to support others (Kusairi et al., 2019). Financial knowledge has become an essential skill because of the instability of global markets, asymmetric information in those markets, the increasing complexity of financial products, and the rapidly increasing growth in financial technology, the study is the first among its kind to evaluate the relationship between financial literacy, financial fragility, and financial well-being in parallel with identifying their determinants, and then they discovered the financial literacy had been shown to enhance an individual's ability to deal with an unexpected financial crisis (Philippas & Avdoulas, 2020). In addition, financial literacy significantly impacts retirement planning, as individuals with a higher level of financial literacy possess more financial instruments, better financial management skills, and improved risk management abilities, all of which contribute to better returns on investment (Larisa et al., 2020). Hence, financial literacy is a critical factor that affects an individual's ability to plan for retirement effectively, as it provides the knowledge and skills needed to make informed financial decisions. Thus, we propose the following hypothesis:

H2. There is a significant relationship between financial literacy and retirement planning awareness and readiness among women in Malaysia and China.

### **2.4 Future Timely Planning**

In a study conducted by Alkhawaja and Albaity (2022), it was found that future timely planning significantly positively affected retirement saving behaviour in the United Arab Emirates. Besides, Larisa et al. (2020) investigated the role of financial literacy as a mediator between demographic factors and future timely planning in relation to retirement planning. However, the relationship between future timely planning and retirement planning awareness and readiness among women remains to be determined. According to behavioural theory, individuals are more likely to engage in retirement planning if they have a plan for their future. Individuals may be more likely to engage in retirement planning if they have a clear vision of their future and a plan to achieve their goals. This is because having a clear understanding of their future needs and desires allows individuals to assess their current financial situation better, determine how much they need to save and identify the best strategies to achieve their retirement goals. Based on this, we propose the following hypothesis:

H3. There is a significant relationship between future timely planning and retirement planning awareness and readiness among women in Malaysia and China.

## **2.5 Financial Self-Efficacy**

Financial self-efficacy has a positive influence on personal financial management behaviour and seems to have a positive moderating impact on the association of money attitude and personal financial conduct behaviour (Rosuzeita Fauzi, 2020) across Study 1 (N = 675) focused on planning, as both procrastination and poor financial habits are negatively related to planning. Results confirmed that procrastination was a significant predictor of personal finances, but the propensity to plan was not. Study 2 (N = 500) explored the roles of procrastination and financial self-efficacy in two facets of financial behaviour, financial impulsivity and financial planning. Results indicated that the effect of procrastination on financial behaviour was fully mediated by financial self-efficacy. Hence, these results suggest that procrastination operates primarily through its self-efficacy component to impact financial behaviour negatively (Gamst-Klaussen et al., 2019). financial self-efficacy is a variable that can also influence one's saving behaviour. Besides, the financial self-efficacy can also affect financial management behaviour of a person(Qamar et al., 2016). There is an influence of financial knowledge, financial self-efficacy, financial literacy, and emotional intelligence on the financial management of female lecturers at state universities. This means that when someone has a lot of knowledge about finance, then that knowledge is used as one of the factors in financial decision-making. That way, the decision taken is the right decision so that it will affect financial management. Likewise, the higher the financial efficacy of female lecturers, the more responsible the individual will be in managing their finances. Also, the higher the financial literacy of a female lecturer, the better personal financial management will be, and the emotional intelligence of a female lecturer, the higher the emotional intelligence a person can manage and manage their finances well. (Asandimitra & Kautsar, 2019) Financial self-efficacy (FSE) is a psychological trait that has significant influence over a wide array of financial behaviour—from credit market participation to saving and investing behaviour. Research has provided consistent evidence that suggests higher FSE supports prudent and growth-oriented financial behaviour across a variety of samples(Asebedo et al., 2019).

## **2.6 Retirement Planning Awareness and Readiness**

Prior research has established that planners also accumulate far more retirement wealth(Lusardi & Beeler, 2007);(Lusardi & Mitchell, 2011). Unfortunately, despite the need for self-reliance in retirement savings, the data show that most Americans do not engage in retirement planning.

At present, the term "retirement planning" has been broadly used across different perspectives, and there is no definitive way to substantially define retirement planning. As an individual leaves the labour force, the individual is said to be entering a new phase of life commonly known as retirement (Actuaries., 2012b). According to(Bowlby, 2007),

retirement is both an event and a state of being. It is an important life-changing event that marks the beginning of a new life stage where individuals cease working life (Leandro-França et al., 2016). Another scholar (Actuaries., 2012a) defines retirement as the act of leaving employment after the individual has worked for a substantial period of time. Nevertheless, retirement is generally referred to as a period full of changes and uncertainties, as any retirement decision made will affect an individual's life.

Tan & Singaravelloo (2020) find Malaysian government officers have relatively high levels of financial literacy and good financial behaviour, except that their retirement planning behaviour reportedly stood average. Although no significant relationship was found between age and gender with level of financial literacy, the study has otherwise proved that both education level and personal income level significantly affect the level of financial literacy among Malaysian government officers. It is also concluded that no significant relationship was found between financial literacy and retirement planning among Malaysian government officers. In addition, the study revealed that financial literacy does not mediate the relationship between financial behaviour and retirement planning.

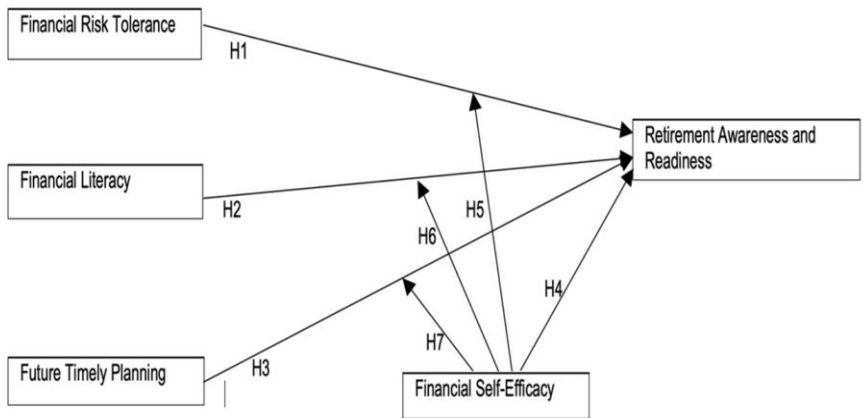


Fig. 1: Research Framework

Akben-Selcuk & Aydin (2021) examined that perceived financial preparedness for retirement is positively related to parental influences. Ketkaew et al., (2020) found that an individual's retirement behaviour is related to perceived retirement benefits, perceived health status, financial attainment capacity, and perceived parental burden. The SEM model also suggested the positive relationship between retirement behaviour and individual short-term financial goals, which in turn influence long-term financial goals. Finally, the MGA indicated behaviour differences between rural and urban citizens in terms of retirement benefit sufficiency and perceived parental burden.

H4. There is a significant relationship between financial self-efficacy toward retirement planning awareness and readiness among women in Malaysia and China.

H5. Financial self-efficacy moderates the relationship between financial risk tolerance and Retirement Planning Awareness and Readiness among women in Malaysia and China.

H6. Financial self-efficacy moderates the relationship between financial literacy and Retirement Planning Awareness and Readiness among women in Malaysia and China.

H7. Financial self-efficacy moderates the relationship between future timely planning and Retirement Planning Awareness and Readiness among women in Malaysia and China.

Based on the above scholarly review guided by existing theories and empirical evidence, this study proposes the following research model with its direct effect pathways (Figure 1).

### 3.0 Methodology

The study will employ a purposive sampling technique to distribute a self-administered questionnaire to 305 respondents; there are two sets of questionnaires, the Chinese one is by so jump, and the Malaysian one is by Google Questionnaire; the sample size is proportional to the population of Malaysia and China, respectively. The questionnaires will be collected 105 per set from females who work in Malaysia, including West and East, and 200 per set from females who work at Bei Jing, Shang Hai, Guang Zhou, and Shen Zheng in China currently. For income, the Chinese survey is divided into 6 levers per year, and the Malaysian survey is divided into 4 levels per year. Orientation is female and is at 23 years old years or more and 55 years of age below, graduate school above. Comprising 100 female employees in Malaysia and 200 in China. SPSS and SmartPLS will be used to test the hypotheses. A pilot test was conducted, and Cronbach Alpha showed that all the instruments were acceptable, ranging from 0.724 to 0.881. As in Table 1, five constructs were identified, which were the sense of presence, experience quality, hedonic motivation, psychological detachment, family involvement and gratification of wellness tourism.

Table 1. Constructs and their related studies

Constructs	Studies
i)Financial Risk Tolerance	Jacobs & Hershey 2005
ii)Financial Literacy	Williamson 1998
iii)Future Timely Planning	Jacobs & Hershey 2005
iv)Financial Self-Efficacy	Lown 2011
v)Retirement Planning Awareness and Readiness	Moorthy & Kai, 2012

### Demographic Profile



In Table 2, the average level of the respondents comes from 5 age groups in Malaysia; most of the respondents come from 23-34 in China. In terms of income, most of the respondents come from an income level of CNY80k-CNY120k (68 %) in China. In terms of Education level, most respondents come from a diploma and degree in Malaysia; hence, in China, most of the respondents are at the diploma level (57.5%).

Table 2. Demographic profile for female Malaysia and China

Variables	Female Malaysian (%)	Female Chinese (%)
1)Age:(n=105 and 200)		
23-28	15(14.3%)	52(26%)
29-34	21(20.0%)	63(31.5%)
35-40	25(23.8%)	38(19%)
41-44	16(15.2%)	20(10%)
45-49	13(12.3%)	13(6.5%)
50-55	15(14.3%)	14(7%)
2)Education level:(n=105 and 200)		
Diploma	47(44.8%)	115(57.5%)
Degree	42(40%)	54(27%)
Master	14(13.3%)	19(9.5%)
PhD	2(1.9%)	12(6%)
3)Income level:(n=105 and 200)		
Less Rm50k/Less CNY80k	21(20.0%)	29(14.5%)
Rm51k-60k/CNY80k-120k	32(30.5%)	136(68%)
Rm61k-70k/CNY121k-200k	35(33.3%)	28(14%)
Rm71k above/CNY200k above	17(16.2%)	7(3.5%)

#### 4.0 Results

Table 3 presents the results of the combined data from both countries, which indicate that all items, except for one, have good loadings ranging from 0.725 to 0.898, with composite reliability ranging from 0.784 to 0.950 for the constructs. The average variance extracted (AVE) for the constructs is higher than 0.40, indicating acceptable validity for the constructs. The composite reliability (CR) has fulfilled the threshold, indicating a satisfactory measurement model.

Table 3. The results of the combined data from both countries

Model Construct	Measurement Item	Loading	CR	AVE
	1. I am willing to risk financial losses.	MAL:0.874 CHA:0.897 Com: 890	MAL: 0.910 CHA: 0.925 Com: 0.920	MAL: 0.734 CHA: 0.769 Com: 0.757
	2. I prefer investments that have higher returns even though they are riskier.	MAL: 0.847 CHA:0.892 Com: 0.879		

Financial Risk Tolerance	3. The overall growth potential of a retirement investment is more important than the level of risk of the investment.	MAL: 0.826 CHA: 0.823 Com: 0.826		
	4. I am very willing to make risky investments to ensure financial stability in retirement.	MAL: 0.862 CHA: 0.904 Com: 0.886		
	5. As a rule, I would never choose the safest investment when planning for retirement.	MAL: 0.872 CHA: 0.868 Com: 0.870		
Financial Literacy	1. I am knowledgeable about Personal Financial Planning.	MAL: 0.746 CHA: 0.808 Com: 0.794	MAL: 0.910 CHA: 0.956 Com: 0.946	MAL: 0.551 CHA: 0.716 Com: 0.673
	2. I am knowledgeable about Deposit Insurance.	MAL: 0.771 CHA: 0.870 Com: 0.847		
	3. I am knowledgeable about Certificate of Deposit Terms, Loan Co-Sign Consequences Annual Percentage Rate.	MAL: 0.705 CHA: 0.859 Com: 0.822		
	4. I am knowledgeable about Credit Card Use.	MAL: 0.711 CHA: 0.816 Com: 0.787		
	5. I am knowledgeable about Health Insurance Characteristics	MAL: 0.755 CHA: 0.851 Com: 0.821		
	6. I am knowledgeable about Common Stock Investing for Selected Investment Goals Retirement - Benefits of Early Investment	MAL: 0.732 CHA: 0.821 Com: 0.800		
	7. I am knowledgeable about Mutual Fund Investment Return	MAL: 0.765 CHA: 0.854 Com: 0.829		
	8. I am knowledgeable about High Risk - Return Investment Suitability	MAL: 0.760 CHA: 0.853 Com: 0.833		
	9. I am knowledgeable about Interest Rate Changes and Treasury Bond	MAL: 0.729 CHA: 0.853 Com: 0.821		

	10.I am knowledgeable about Foreign Exchange Rates	MAL: 0.747 CHA: 0.874 Com: 0.847		
Future Timely Planning	1. I follow the advice to save for a rainy day.	MAL: 0.738 CHA: 0.790 Com: 0.761	MAL: 0.845 CHA: 0.864 Com: 0.858	MAL: 0.562 CHA: 0.593 Com: 0.583
	2. I enjoy thinking about how I will live years from now in the future.	MAL: 0.767 CHA: 0.782 Com: 0.780		
	3. The distant future is too uncertain to plan for.	MAL: 0.771 CHA: 0.719 Com: 0.741		
	4.The future seems very vague and uncertain to me.	MAL: 0.727 CHA: 0.742 Com: 0.731		
	5. I pretty much live on a day-to-day basis.	MAL: 0.775 CHA: 0.799 Com: 0.796		
	6. I enjoy living for the moment and not knowing what tomorrow will bring.	MAL: 0.716 CHA: 0.785 Com: 0.769		
Financial Self-Efficacy Scale	1.I can always manage to solve difficult problems if I try hard enough.	MAL: 0.822 CHA: 0.813 Com: 0.805	MAL: 0.930 CHA: 0.926 Com: 0.926	MAL: 0.640 CHA: 0.629 Com: 0.629
	2.It is hard to stick to my spending plan when unexpected expenses arise.	MAL: 0.855 CHA: 0.819 Com: 0.829		
	3.It is challenging to make progress toward my financial goals.	MAL: 0.753 CHA: 0.809 Com: 0.792		
	4.When unexpected expenses occur, I usually have to use credit.	MAL: 0.796 CHA: 0.820 Com: 0.809		
	5.I am confident that I can deal efficiently with unexpected events.	MAL: 0.809 CHA: 0.772 Com: 0.784		
	6.When faced with a financial challenge, I have a hard time figuring out a solution.	MAL: 0.771 CHA: 0.806 Com: 0.795		
	7.I lack confidence in my ability to manage my finances.	MAL: 0.789 CHA: 0.748 Com: 0.757		

	8.I worry about running out of money in retirement.	MAL: 0.794 CHA: 0.780 Com: 0.786		
	9.I can remain calm when facing difficulties because I can rely on my coping abilities.	MAL: 0.808 CHA: 0.743 Com: 0.777		
Retirement Planning Awareness and Readiness	1. I am concerned about the state of my financial preparation for my retirement.	MAL: 0.750 CHA: 0.714 Com: 0.713	MAL: 0.855 CHA: 0.848 Com: 0.848	MAL: 0.633 CHA: 0.623 Com: 0.623
	2. I am confident that I will have a decent standard of living in my retirement.	MAL: 0.806 CHA: 0.821 Com: 0.818		
	3. At present, I rate my financial preparation for retirement as good.	MAL: 0.831 CHA: 0.815 Com: 0.821		
	4. I am confident my standard of living in retirement will be the same. My life is now even enhanced.	MAL: 0.774 CHA: 0.796 Com: 0.784		
	5. I am confident that I could work out what my expected income and expenditure would be in retirement	MAL: 0.814 CHA: 0.798 Com: 0.805		

As shown, the direct effect of independent variables is 0.510 for Malaysia in Figure 4 and 0.438 for China in Figure 2. In Figure 6, the total effect is 0.432, indicating a high statistical measure of fit in the model. Chin (1998) recommends R2 values for endogenous latent variables based on substantial (0.67), moderate (0.33), and weak (0.19). Figure 3 shows that financial literacy, future timely planning, and financial self-efficacy are significantly related to retirement planning awareness and readiness among female Chinese; furthermore, financial self-efficacy moderates future timely planning towards retirement planning awareness and readiness among women in China. Similarly, Figure 5 indicates that financial literacy, future timely planning, and financial self-efficacy are significantly related to retirement planning awareness and readiness among female Malaysians.

Moreover, financial self-efficacy moderates financial risk tolerance towards retirement planning awareness and readiness among women in Malaysia. Finally, in Figure 7, the combined results of both countries present that financial literacy, future timely planning, and financial self-efficacy have a significant relationship towards retirement planning awareness and readiness. Additionally, financial self-efficacy has a moderating effect on future timely planning towards retirement planning awareness and readiness among women in the combined.

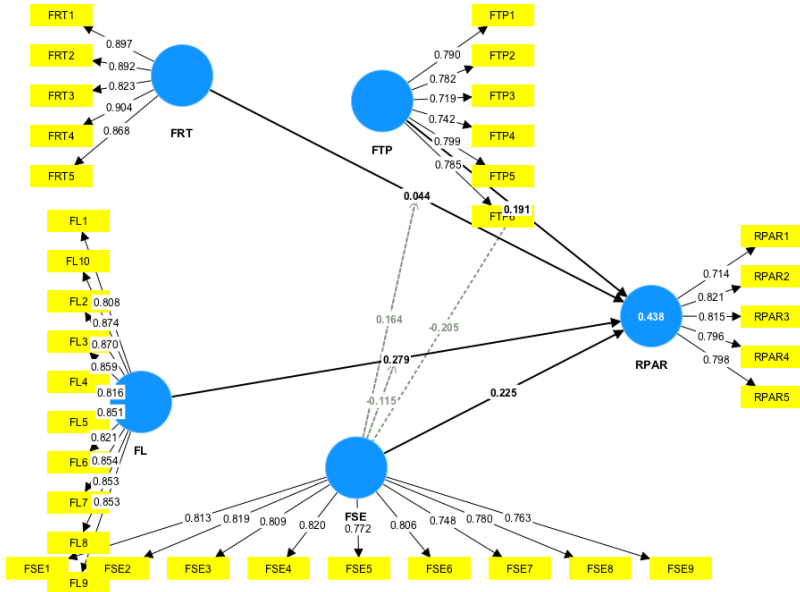


Fig. 2: Results of the path analysis: China

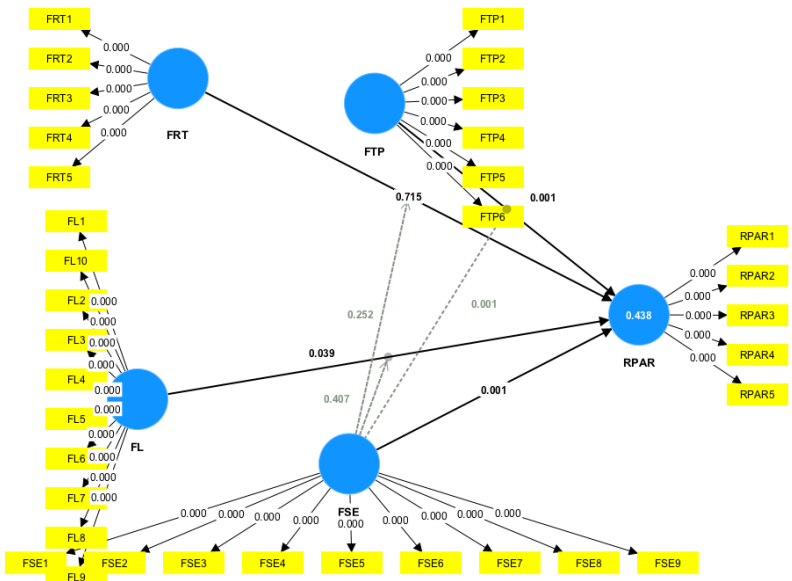


Fig. 3: Results of Bootstrapping: China

The direct effect explained by the independent variables is 0.510 for Malaysia in Figure 4 and 0.438 for China in Figure 2. In Figure 6, the R2 is affected by China's, where the total effect is 0.432, showing a high statistical measure of fit in the model. (Chin, 1998) recommend R2 values for endogenous latent variables based on: 0.67 (substantial), 0.33 (moderate), 0.19 (weak).

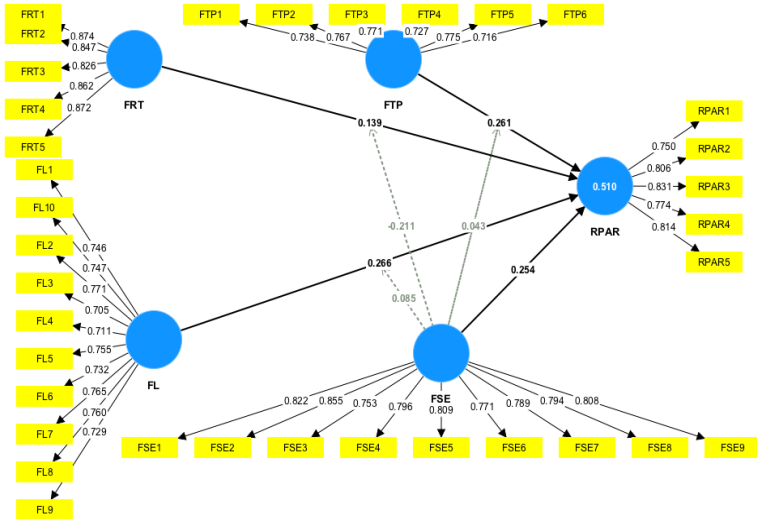


Fig. 4: Results of the path analysis: Malaysia

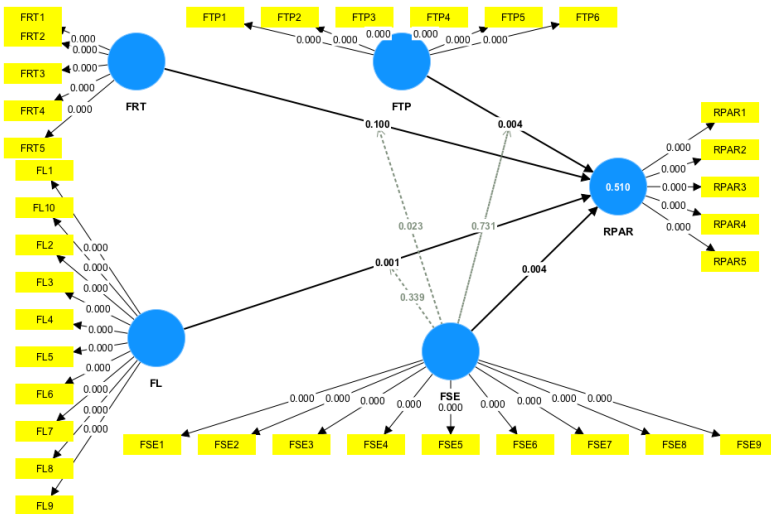


Fig. 5: Results of Bootstrapping: Malaysia

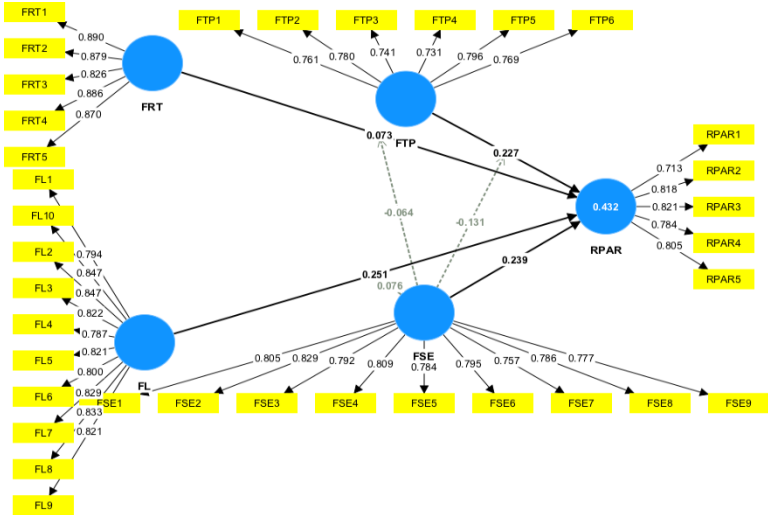


Fig. 6: Results of the path analysis: Combined

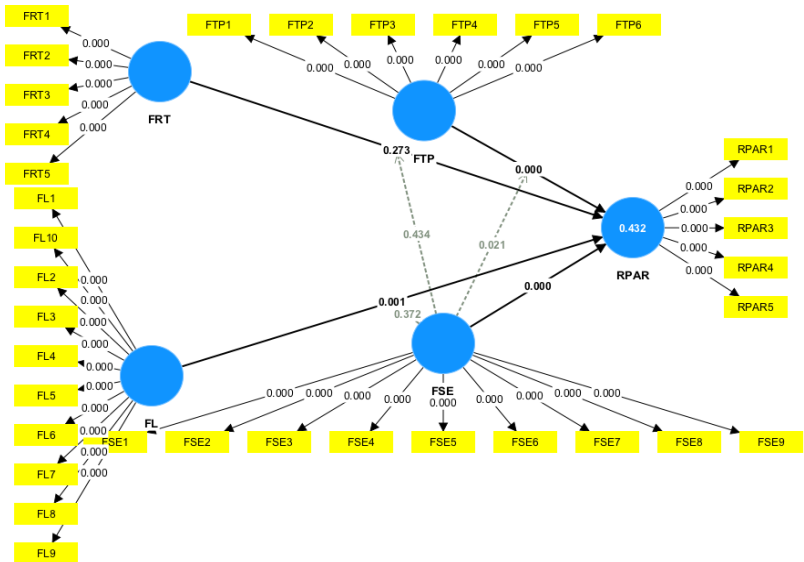


Fig. 7: Results of Bootstrapping: Combined

In Figure 3, the financial literacy, future timely planning, and financial self-efficacy have shown a significant relationship towards retirement planning awareness and readiness for female Chinese, On the moderating effect, financial self-efficacy has a moderating effect

on future timely planning towards retirement planning awareness and readiness among women in China. In Figure 5, the financial literacy, future timely planning, and financial self-efficacy have shown a significant relationship towards retirement planning awareness and readiness for female Malaysian also. On the moderating effect, financial self-efficacy has a moderating effect on financial risk tolerance towards retirement planning awareness and readiness among women in Malaysia. In Figure 7, the combination of both countries presented the financial literacy, future timely planning, and financial self-efficacy have shown a significant relationship towards retirement planning awareness and readiness. On the moderating effect financial self-efficacy has a moderating effect on future timely planning towards retirement planning awareness and readiness among women in the combined results.

Table 4 documents the summary of our findings.

Table 4. Results of hypothesis testing for Malaysia, China and both countries (combined)

Hypothesis	Relationship	Coefficient	T statistics	P-values	Results
H1	Financial Risk Tolerance -> Retirement Planning Awareness and Readiness	MAL: 0.266 CHA: 0.279 Com.: 0.251	MAL: 3.225 CHA: 2.060 Com.: 3.346	MAL: 0.001 CHA: 0.039 Com.: 0.001	MAL: Accepted CHA: Accepted Com.: Accepted
H2	Financial literacy -> Retirement Planning Awareness and Readiness	MAL: 0.139 CHA: 0.044 Com.: 0.073	MAL: 1.644 CHA: 0.365 Com.: 1.095	MAL: 0.100 CHA: 0.715 Com.: 0.273	MAL: Rejected CHA: Rejected Com.: Rejected
H3	Future Timely Planning -> Retirement Planning Awareness and Readiness	MAL: 0.261 CHA: 0.191 Com.: 0.227	MAL: 2.901 CHA: 3.213 Com.: 4.808	MAL: 0.004 CHA: 0.001 Com.: 0.000	MAL: Accepted CHA: Accepted Com.: Accepted
H4	Financial Self-Efficacy -> Retirement Planning Awareness and Readiness	MAL: 0.254 CHA: 0.225 Com.: 0.239	MAL: 2.882 CHA: 3.407 Com.: 4.355	MAL: 0.004 CHA: 0.001 Com.: 0.000	MAL: Accepted CHA: Accepted Com.: Accepted
H5	Financial Risk Tolerance x Financial Self-Efficacy -> Retirement Planning	MAL: -0.211 CHA: 0.164 Com.: -0.064	MAL: 2.266 CHA: 1.145 Com.: 0.783	MAL: 0.023 CHA: 0.252 Com.: 0.434	MAL: Accepted CHA: Rejected Com.: Rejected



	Awareness and Readiness				
H6	Financial Literacy x Financial Self-Efficacy -> Retirement Planning Awareness and Readiness	MAL: -0.211 CHA: -115 Com.: -0.064	MAL: 0.956 CHA: 0.829 Com.: 0.893	MAL: 0.339 CHA: 0.407 Com.: 0.372	MAL: Rejected CHA: Rejected Com.: Rejected
H7	Future timely planning x Financial Self-Efficacy -> Retirement Planning Awareness and Readiness	MAL: 0.043 CHA: -0.205 Com.: -0.131	MAL: 0.344 CHA: 3.224 Com.: 2.317	MAL: 0.731 CHA: 0.001 Com.: 0.021	MAL: Rejected CHA: Accepted Com.: Accepted

## 5.0 Discussion

Based on the results, comparing both countries, there are some points and different points between both countries; the highlighted pink means hypothesis "Accept" and the highlighted yellow means hypothesis "Reject". the same points are financial risk tolerance, future timely planning, and financial self-efficacy were found to have a significant relationship with retirement planning awareness and readiness (H1, H3, H4) among women in the combined sample. However, for financial literacy, the relationships were all statistically non-significant (H2) towards retirement planning awareness and readiness among women, which differs from the literature that suggests financial literacy is essential in the retirement planning area in China and Malaysia(H2). This finding is consistent with the study conducted by Asandimitra & Kautsar (2019), where there is no influence of financial attitude, financial literacy, and emotional intelligence on the financial management of female university lecturers in private universities was observed. It is worth noting that financial self-efficacy will not be enhanced by financial literacy towards retirement planning awareness and readiness (H6).

Furthermore, the different points between both countries are that financial risk tolerance was enhanced by financial self-efficacy towards retirement planning awareness and readiness among women in Malaysia; this implies that financial self-efficacy for retirement planning awareness and readiness has mixed effects for different nationalities (H5). This finding is different from Gamst-Klaussen et al. (2019), who stated that the self-efficacy component impacts financial behaviour negatively. Additionally, the findings suggest that financial self-efficacy has a moderating effect on future timely planning towards retirement planning awareness and readiness among women in the combined sample and China (H7). However, in Malaysia, financial self-efficacy non-significant enhancement in the relationship of future timely planning towards retirement awareness and readiness; this

result is in line with the study conducted by Rosuzeita Fauzi (2020), which shows that financial self-efficacy has a positive influence on personal financial management behaviour and seems to have a positive moderating impact on the association of money attitude and personal financial conduct behaviour.

## **6.0 Conclusion**

This paper contributes to both theory and practice. In theory, this study extends the current research streams on retirement planning awareness and readiness for women in Malaysia and China. By comparing two countries guided by the gender theory and the theory of planned behaviour, it was identified that financial risk tolerance, future timely planning, and financial self-efficacy are direct determinants of retirement planning awareness and readiness in the combined sample. Moreover, this study assessed financial self-efficacy as a moderator, extending the current personal finance literature. As postulated in the findings, financial self-efficacy directly predicts retirement planning awareness and readiness. Simultaneously, it demonstrated significant moderating effects for financial risk tolerance and future timely planning in the combined sample.

This study also has practical implications and recommendations for young women who live in Malaysia and China. For example, the identification of financial self-efficacy as a significant predictor and moderator in the relationships towards retirement planning awareness and readiness indicates that developing a sense of self-efficacy from an early age is likely to enhance retirement planning awareness and readiness for women who live in Malaysia and China. Finally, this study provides insights for the better adoption of women's issues by the government to help women have a better quality of life in society and promote fertility in Malaysia and China.

However, there are some limitations to this study. The samples of China were chosen from four cities, namely Beijing, Shanghai, Guangzhou, and Shenzhen, and female respondents who work in China and Malaysia were used. Future research may encourage respondents from diverse backgrounds, and a qualitative approach could be used to provide in-depth findings with the government or organizations of females for a more significant sample to validate the research model and multi-national comparison. Moreover, it is recommended that future studies incorporate external factors such as the rural/urban divide, social status, government policies, and the role of global organizations in shaping retirement planning awareness and readiness among women. This would strengthen the current findings, which are limited to individual-level factors only.

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## Article Contribution to Related Field of Study

The article contributes to helping women understand how to plan their life for retirement from the financial angle, though the influence factors and moderator factors serve as an early signal indicator of women, family education, and society to help address the women face the problem and another problem is the fertility decrease. Moreover, this is the first time comparing Malaysian women and China women; there is a breakthrough discovery.

## Authors Declaration

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