

พฤติกรรมทางการเงินเพื่อวัยเกษียณของบุคลากร
มหาวิทยาลัยเทคโนโลยีราชมงคลตะวันออก วิทยาเขตจันทบุรี

THE FINANCIAL PLANNING BEHAVIOR FOR RETIREMENT
OF THE PERSONNAL IN RAJAMANGALA UNIVERSITY
OF TECHNOLOGY TAWAN-OK, CHANTHABURI CAMPUS

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บทคัดย่อ

มีวัตถุประสงค์เพื่อศึกษา 1) พฤติกรรม 2) ปัจจัยที่มีผลต่อพฤติกรรม และ 3) รูปแบบการวางแผนทางการเงินเพื่อวัยเกษียณของบุคลากรมหาวิทยาลัยเทคโนโลยีราชมงคลตะวันออก วิทยาเขตจันทบุรี จำนวนตัวอย่างทั้งหมด 97 ตัวอย่าง โดยใช้วิธีการสุ่มตัวอย่างแบบเจาะจง เครื่องมือที่ใช้ในการเก็บข้อมูลคือแบบสอบถาม สถิติที่ใช้ในการวิจัยประกอบด้วยสถิติเชิงพรรณนาและสถิติเชิงอนุมาน ได้แก่ ค่าความถี่ ค่าร้อยละ ค่าเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน และการวิเคราะห์การถดถอยเชิงพหุ ผลการศึกษาพบว่า ด้านพฤติกรรมการวางแผนเพื่อวัยเกษียณ มีการเตรียมความพร้อมหลังเกษียณอายุ (ร้อยละ 83.33) การออมและการลงทุนในรูปแบบของเงินฝากธนาคาร (ร้อยละ 79.38) ไม่ได้กำหนดสัดส่วนที่แน่นอน ออมตามเงินที่เหลือจากการใช้จ่าย (ร้อยละ 32.99) ปัจจัยด้านความพร้อมในการเตรียมตัวเพื่อวัยเกษียณ มีผลต่อพฤติกรรมการวางแผนทางการเงินเพื่อวัยเกษียณในระดับมากที่สุด ค่าเฉลี่ย 3.51 ปัจจัยด้านขนาดรายได้ในปัจจุบัน มีผลต่อพฤติกรรมการวางแผนทางการเงินเพื่อวัยเกษียณในระดับปานกลาง ค่าเฉลี่ย 3.22 ปัจจัยด้านค่าใช้จ่ายในปัจจุบัน มีผลต่อในระดับปานกลาง ค่าเฉลี่ย 3.15 ปัจจัยด้านภาระหนี้สิน มีผลในระดับน้อย ค่าเฉลี่ย 2.33 ปัจจัยด้านผลตอบแทนที่จะได้รับจากการออม มีผลในระดับปานกลาง ค่าเฉลี่ย 3.12 ปัจจัยด้านความแน่นอนของระดับรายได้ที่คาดว่าจะได้รับหลังเกษียณอายุ มีผลในระดับปานกลาง ค่าเฉลี่ย 3.31 รูปแบบการออมและการลงทุนที่เหมาะสม ได้แก่ 1) กองทุนสำรองเลี้ยงชีพ 2) กองทุนบำเหน็จบำนาญข้าราชการ 3) หุ้นสหกรณ์ และ 4) หุ้น/หลักทรัพย์

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Abstract

The purposes of this research were to study the following: (1) Behavior (2) Factors affecting behavior and (3) Financial planning model for retirement of the personnel at Rajamangala University of Technology Tawan-ok, Chanthaburi Campus. The total of 97 samples were collected. Using a purposive sampling. An important instrument used to collect data was the questionnaires. The researchers employed descriptive and inferential statistics, such as frequency, percentage, average, and standard deviation. and multiple regression analysis. The findings of the study revealed that the in retirement planning behavior, there is a preparation after retirement (83.33%), savings and investments in style of bank deposits (79.38%), no fixed proportion of savings (32.99%). The factors of preparing for retirement had the greatest impact on financial planning (3.51). The factors of current income size had the moderate impact on financial planning (3.22), The factors of Current cost size had the moderate impact on financial planning (3.15). The factors of debt burden had the low impact on financial planning (2.33). The factors of return from savings had the moderate impact on financial planning (3.12). The factors of the certainty of the expected income level after retirement had the moderate impact on financial planning (3.31). A found appropriate investment and savings model is associated with 1) Provident Fund 2) Government Pension Fund 3) cooperative stock and 4) set/ securities.

Keywords: Behavior, Financial Planning, Retirement

1. Introduction

Thai society is currently facing a major demographic structural change, entering an aging society with a decrease in the proportion of the working and childhood population. Due to the steady decline in birth rates and mortality rates, the population has been decreasing. In addition, the implementation of successful demographic policies and family planning, as well as progress in the development of the country both economically and socially. As a result, Thai people are in good health and live longer. The population has a higher chance of gaining a good education. They have knowledge and skills to prevent diseases and maintain good health, as well as more effective family planning. As a result, the average Thai population lives longer. In other words, the success has led to a decrease in the reproductive circumstances and birth rate, resulting in structural changes in the population. In Figure 1, the longevity of the population ages in Asia is compared between 1990 and 2020 in all countries, the population tends to live longer, that is to say, the population of older age is likely to increase.

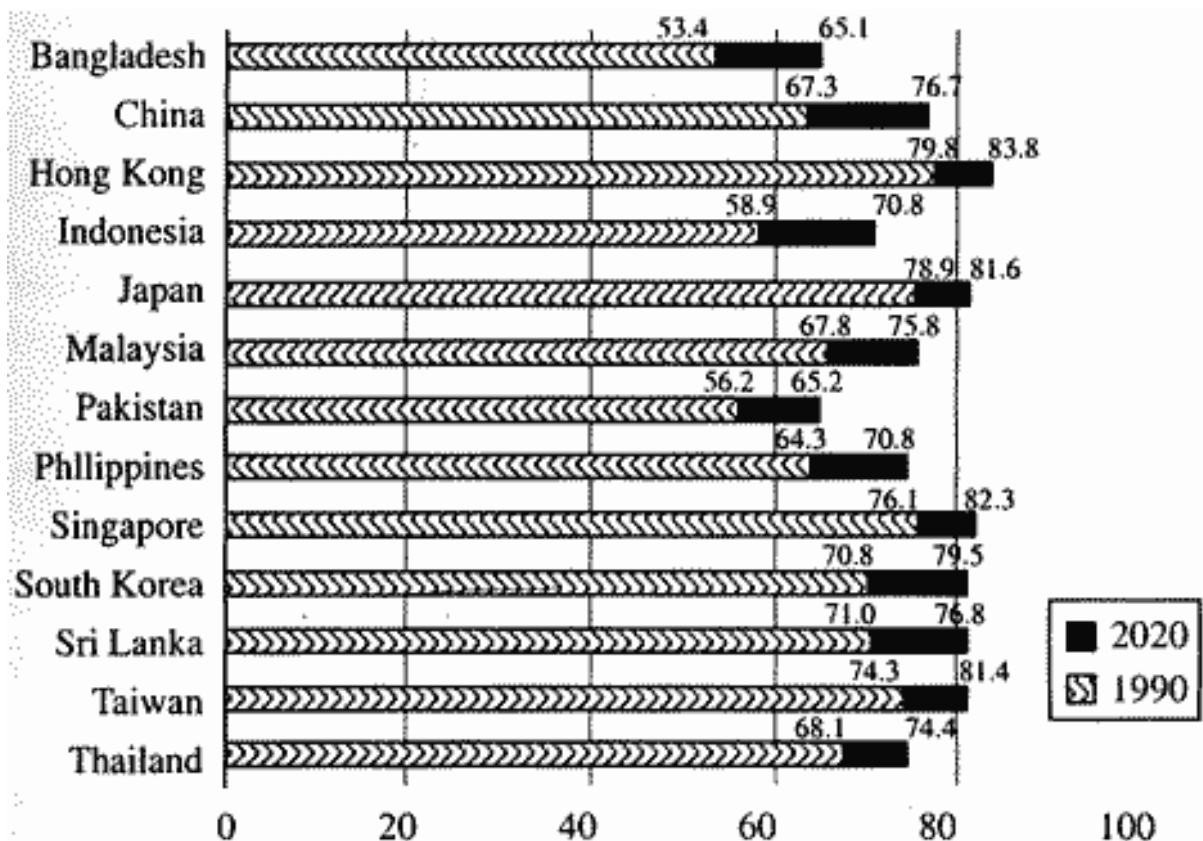


Figure 1 Longevity of life in Asia

Source: U.S. Bureau of Census/International Data Base. (2020)

A population of both males and females over the age of 60 is defined as "elderly" by the United Nations. The World Health Organization has not defined the elderly, owing to the fact that different countries have different definitions of the elderly, based on age of birth, social, cultural, and functional markers. For example, in prosperous countries, the elderly are usually classified from the age of 65 and older, or some countries may define the elderly based on retirement age (ages 50, 60, or 65 years old), or by physical conditions, in that, the older women have worse physical conditions.

Thailand's Seniors Act, B.E. 2543, defines "elderly" (2003) as a person who is over sixty years old and is a Thai national. The United Nations divides the phrase "aging society" into three stages: ageing society (aging society), old society, and super-aged society, with distinct degrees as defined in Thailand and other nations across the world. The definition of all stages of an aging society is used in the same meaning in the following; 1) To be classified as an aging society, a country must have more than 10% of its people aged 60 or older, both males and females, or more than 7% of its total population; 2) When the population of people aged 60 and above reaches 20% of the total population, or when the population of people aged 65 and up reaches 14% of the total population, the country is said to be completely aging; 3) A super-aged society is one in which more than 20% of the country's population is 65 years old or older. However, according to the boom, every country in the globe has entered an aging

society at different moment so. Prosperity definitely has an impact on people's health and longevity (Chomphunuch, 2013)

Thailand has been an aging society since 2005, with 10.3 percent of the population over the age of 65. Thailand has entered an aging society for the first time, according to the United Nations definition, which states that countries with a population of more than 60 years of age, accounting for more than 10% of the total population, are classified as entering an aging society, and countries with a population of 60 years of age or older accounting for more than 20% of the total population are classified as entering a fully aging society. Thailand's old population would rise to 22.7 percent by 2030, making it a perfect aging society according to UN rules. In figure 2.

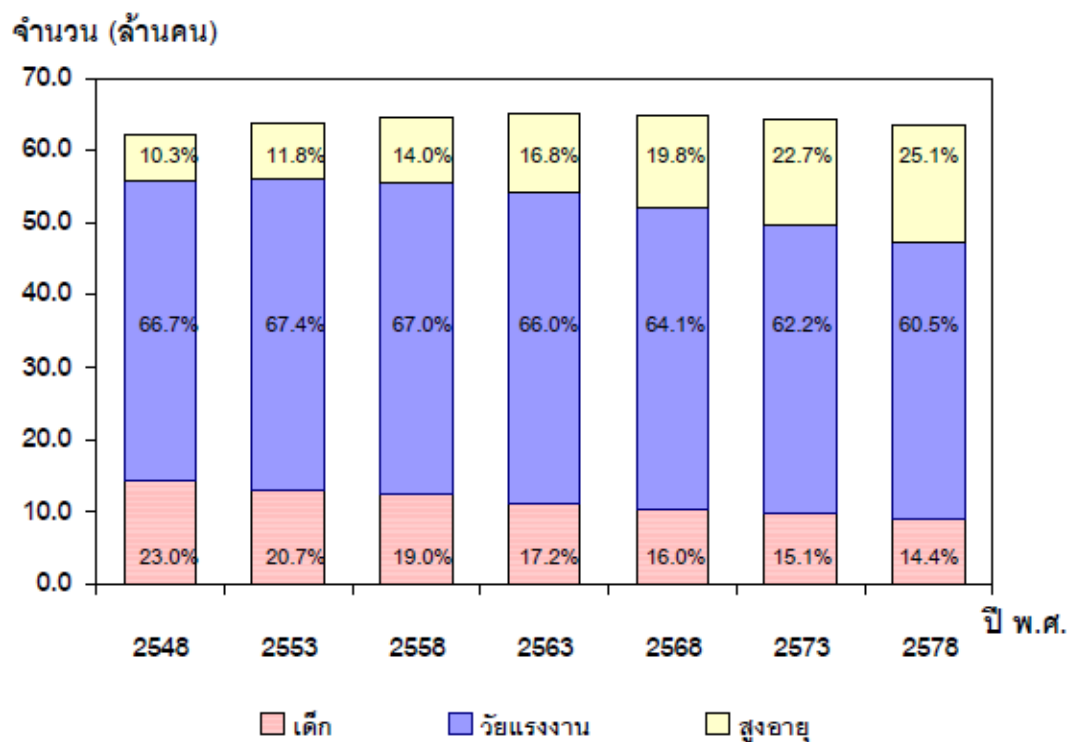


Figure 2 Population of different ages 2005 – 2035

Source: Wapatanawong & Prasatkul (2019).

Thailand should be prepared to accommodate an aging society when it enters in that period. At the same time, the percentage of people who work is falling. Overall productivity will suffer as a result. This might lead to a drop in national income, putting the country's economy in jeopardy. When the seniors must leave the workforce without a source of income, they will rely on the income generated by the money saved. If people do not save enough money, they may have difficulties in their daily lives, putting a strain on the society that pays suitable and necessary social benefits to the aged group. Physical and mental circumstances

vary with age, requiring adaptation, and more crucially the condition begins to worsen. Then there will be health issues. All of this is a challenge that all sectors should be prepared to address in order to properly handle the ever-increasing number of elderly people. Preparing for retirement is a process that should begin at a young age in order for the population to progressively become accustomed to the thought of retiring, lowering retiree problems, allowing retirees to adapt to new responsibilities, and finding satisfaction in retirement.

In Rajamangala University of Technology Tawan-ok, Chanthaburi Campus, there are academic and academic support workers exist, and the employment model that includes government servants, higher education employees, and full-time employees. Only civil servants receive pensions/ pensions in the aforementioned. As a result of retirement, it's interesting to see how people in various occupations preparing for themselves and realizing their retirement age, as well as how financial planning starts to support future retirement.

Research into The Financial Planning Behavior for Retirement of the personnel in Rajamangala University of Technology Tawan-ok, Chanthaburi Campus is necessary to see that if the university employees are not properly prepared for their retirement, afterwards when the time comes, such the personnel may be seriously financially harmed. If sufficient preparation and financial planning for retirement are not in place, it will be incumbent upon the employees to retirement financial planning. The researchers will look into the following topics in this study:

- 1) Study the financial planning behavior for retirement of the personnel in Rajamangala University of Technology Tawan-ok, Chanthaburi Campus.
- 2) Study the factors affecting the financial planning behavior for retirement of the personnel in Rajamangala University of Technology Tawan-ok, Chanthaburi Campus.
- 3) Study financial planning model suitable for the personnel in Rajamangala University of Technology Tawan-ok, Chanthaburi Campus.

This is done in the best interests of the people, universities, government agencies and related private entities and for laying out policy guidelines for preparing retirees for the workforce to become qualified and potential seniors in the future.

2. Literature Review

Review of research on the behavior of financial planning for pre-retirement. In conclusion from the results of past research studies findings;

Patnee (2012). A study of personal finance planning for retirement as a case study of teachers affiliated with Bangkok schools, finding that the main savings model is the civil service pension, investment in bank deposits, cooperative stock investments. Readiness factors found that: Most pay attention to the factors that affect financial planning at retirement. Be aware

of information and information. Financial, economic, political Regular marketing and investment

Penprapa (2015). Which studied pre-retirement preparation as an action plan or practice. To prepare for life after retirement, therefore, there must be 6 different aspects of preparation: 1) mental preparation, 2) physical preparation, 3) property preparation, 4) preparation for leisure activities, 5) family relationship preparation, 6) housing preparation. Those who are well prepared will be able to live happily with after retirement with good quality of life.

Sirilak and Chanjaras (2016). A study of financial planning behavior for retirement of income earners between the ages of 22-60 in muang district, Udon Thani province, which found that most people chose to plan their retirement finances by depositing money with banks and needed more knowledge about retirement financial planning, accounting for 55.81%.

Suratchana (2017). Study of financial planning for security in old for rubber planters, which found that (1) The financial planning process of the rubber planters was to take action when a chance presented itself. The rubber planters' opinions of financial plans for the elderly were suitable at a low level. (2) There were significant differences in the financial planning process of the rubber planters according to level of education. (3) There were significant differences in financial planning of the rubber planters according to sex, dependency, and level of income. (4) There was a positive correlation coefficient between the financial planning process and the financial plan of the rubber planters. (5) Regarding overall financial planning for security of life for the elderly rubber planters, it was found that maximum future value stemmed from maximum saving in the same saving period, and from starting to save earlier. This is because principal amount, interest rate and saving period are the key factors that help their savings to grow and remain stable.

Paim & Fazli Sabri. (2010). Conducted a survey on old age savings of employees in Malaysia, which found that Most public and private sector employees have savings for old age. Income is not an important factor in savings, financial behavior affects your chances of saving. Access to financial services and knowledge of financial services are important factors in savings.

3. Research Methodology

3.1 Participants

The research was carried out at the Rajamangala University of Technology Tawan-ok, Chanthaburi Campus. Since the samples based on demographic data on the academic personnel, the known population total 132 people, hence the sample size must be at least $n = 94.04$ samples, according to Taro Yamane's calculation formula. Using a purposive sampling.

3.2 Instruments

The questionnaires were separated into three components, and the researchers used them to define the study instruments:

Section 1: Questionnaires on the general condition of respondents include gender, age, affiliation, education, status, seniority, employment type, income, and family size.

Section 2: Surveys on cognitive and behavioral aspects of savings for financial planning for retirement include savings and investment models. The purpose of saving money is to have a proportion of savings per average income each month and to get familiar with financial planning guidelines for retirement.

Section 3: A questionnaire about the importance of factors affecting retirement savings is a checklist that includes: The data on the factors affecting savings presents the following sub-factors; 1) readiness factors for retirement, 2) current income size factors, 3) current expense factors, 4) debt burden factors, 5) return factors to be earned from savings, 6) certainty factors of the expected income level after retirement, 7) cognitive factors- understanding of savings and investments, 8) cost factors for healthcare after retirement.

3.3 Data Collection and Analysis

To collect data, 94 sets of questionnaires were sent on an online platform, paper and on telephone.

In a statistical analysis for the social science research, the data collected through questionnaires are examined by computers run by a ready-made statistics application. The descriptive statistics used in data analysis are simple statistics such as frequency, average, percentage, and standard deviation. The tool is used to collect data as a rating scale by Method. By assigning a score instead of a weight to each range of comment levels, computing the mean, then applying the mean to the interpretation criteria, the arithmetic mean can be used to translate as follows:

Mean Score	Meaning
4.21 - 5.00	Max.
3.41 - 4.20	Extreme
2.61 - 3.40	Medium
1.81 - 2.60	Less
1.00 - 1.80	Min.

Setting such the criteria is based on the same range or ranges of all points, which are 5, 4, 3, 2, and 1, respectively, when deciding the highest, more, medium, less, and least level score weights, the range is $5-1 = 4$, and each interval is $4/5 = 0.8$.

Multiple regression analysis is being utilized to discover the best retirement financial planning model for personal of Rajamangala University of Technology Tawan-ok, Chanthaburi Campus.

4. Research Results

4.1 Retirement Financial Planning Behavior for personal of Rajamangala University of Technology Tawan-ok Chanthaburi Campus

Savings and investment characteristics

Most of them had savings and investments in the form of bank deposits accounted for 79.38%; accumulated life insurance and land/buildings accounted for 43.30%; cooperative shares accounted for 36.08% of gold, 27.84% of shares/ securities, representing 10.31%; retirement mutual funds and government bonds/treasury bills, 8.25 percent, and provident funds; treasury bonds/treasury bills were 6.19 percent, respectively.

Savings Objectives

The majority of the purpose of saving for emergency spending is 87.63%, second only to retirement use, 73.20% for healthcare expenses at retirement, 60.82% to plan future investments, 43.30% and for the education of family members, 34.02 percent, respectively.

Proportion of savings to each monthly income

Most of the personnel do not set a certain proportion. Savings based on the remaining spending amounted to 32.99% of revenue, second only to 10 – 20% of income, representing 28.87% of income, more than 30% of income, 14.43% below 10% of income, 13.40% 21 – 30% of income, equivalent to 10.31%, respectively.

Characteristics of savings and investments to plan for retirement

Most of the personnel planned in the nature of bank deposits, 61.86%, second only to land/buildings, 51.55%, accumulated life insurance, 32.99% of gold, 30.93% of cooperative shares, 26.80% of shares/ securities, 23.71 % , provident funds, 12.37 % , government bonds/ treasury bills, 11.34 % , provident funds, 9.28 % , government pension funds, 7.22 % , and national savings funds, 2.06 % respectively.

4.2 Factors affecting the financial planning behavior for retirement of the personnel in Rajamangala University of Technology Tawan-ok, Chanthaburi Campus

Readiness factors for preparing for retirement

In Table 1, The readiness factors for preparing for retirement affect the most important level of retirement financial planning behavior. An average of 3.51 in detail showed that the need for additional knowledge factors in planning for retirement was not a good idea. The most impactful average 3.67, the 2nd place, retirement planning preparation factor, 3.53 average, the 3rd earnings factor in retirement planning average 3.47 and the 4th place in retirement planning knowledge factors average 3.41, came respectively.

Table 1 Opinion on the importance of readiness factors for preparing for retirement

factors	Mean	S.D.	Level
need for additional knowledge factors in planning for retirement	3.67	0.876	Extreme
retirement planning preparation factor	3.53	0.950	Extreme
earnings factor in retirement planning	3.47	0.940	Extreme
retirement planning knowledge factors	3.41	0.910	Extreme
Overall	3.51	0.693	Extreme

Current revenue size factors

In Table 2, For current revenue size factors, it has a moderate effect on retirement financial planning behavior. An average of 3.22 in detail showed that regular income factors include salary. Professional fees have the greatest impact; an average 4.15 ranked the 2nd, other income factors such as dividends, rent, interest, average 2.76, and the 3rd place, special income factors including tutoring, overtime, an average 2.73, respectively.

Table 2 Opinion on the importance of current revenue size factors

factors	Mean	S.D.	Level
regular income factors include salary. Professional fees	4.15	0.845	Extreme
other income factors such as dividends, rent, interest	2.76	1.273	Medium
special income factors including tutoring, overtime	2.73	1.273	Medium
Overall	3.22	0.888	Medium

Current cost factors

In Table 3, Current cost factors affect moderate retirement financial planning habits. An average of 3.15 in detail showed that daily cost factors such as food costs, clothing, utility bills, household expenses, have the greatest impact. An average 3.80, the 2nd place premium factors such as life insurance premiums, car, home, an average 3.51, the 3rd place, healthcare expense factors such as medical expenses exercise expenses, supplements averaged 3.08, the 4th place, social expense factors such as wedding aid, work assistance, an average 2.89, the 5th place, educational expense factors such as tuition, extra tuition for children or dependents, an average 2.85, and the 6th place, other expense factors, an average 2.72, respectively.

Table 3 Opinion on the importance of current cost factors

factors	Mean	S.D.	Level
daily cost factors such as food costs, clothing, utility bills, household expenses	3.80	0.885	Extreme
premium factors such as life insurance premiums, car, home	3.51	1.071	Extreme
healthcare expense factors such as medical expenses exercise expenses, supplements	3.08	1.052	Medium
social expense factors such as wedding aid, work assistance	2.89	0.973	Medium
educational expense factors such as tuition, extra tuition for children or dependents	2.85	1.313	Medium
other expense factors	2.72	1.198	Medium
Overall	3.15	0.914	Medium

Debt obligation factors

In Table 4, Debt burden factors affect financial planning habits for retirement to a small extent. The average of 2.33 in detail showed that loan factors had the greatest impact; an average 3.06, the 2nd place, credit card factor, an average 2.67, and the 3rd place, other debt factors an average 2.18, respectively.

Table 4 Opinion on the importance of debt obligation factors

factors	Mean	S.D.	Level
loan	3.06	1.444	Medium
credit card	2.67	1.272	Medium
other debt	2.18	1.180	Less
Overall	2.33	0.875	Less

Return factors from savings

In Table 5, As for return factors from savings, it has a moderate effect on retirement financial planning behavior; an average 3.12.

Table 5 Opinion on the importance of return factors from savings

factors	Mean	S.D.	Level
return factors from savings	3.12	1.081	Medium

Certainty factors of the level of income expected after retirement

In Table 6, For certainty factors of the level of income expected after retirement, it has a moderate effect on retirement financial planning behavior, an average 3.31.

Table 6 Opinion on the importance of certainty factors of the level of income expected after retirement

factors	Mean	S.D.	Level
certainty factors of the level of income expected after retirement	3.31	1.056	Medium

4.3 Financial planning model suitable for the personnel in Rajamangala University of Technology Tawan-ok, Chanthaburi Campus

Multiple regression analysis was employed to test the relationship between independent variables, personal factors of staff at Rajamangala University of Technology Tawan-ok Chanthaburi campus and appropriate financial planning for retirement. Personal factors consist of eight variables: gender, age, education, status, seniority, employment type, for monthly income and family size, the retirement financial planning model consists of 11 forms: bank deposits, provident funds, banks retirement mutual fund, accumulated life insurance, national savings fund, civil service pension fund, cooperative stocks, stocks/securities, government bonds/Treasury bills, gold and land/buildings; the findings offer only the appropriate model. The findings are as follows:

Form 1 Savings and Investments in Provident Fund

In Table 7, There are the following findings: Gender ($\beta = 0.030$, $t = 0.473$, $p\text{-Value} = 0.637$), Age ($\beta = 0.008$, $t = 0.237$, $p\text{-Value} = 0.813$), Education level ($\beta = 0.164$, $t = 2.444$, $p\text{-Value} = 0.017$), Status ($\beta = 0.107$, $t = 2.164$, $p\text{-Value} = 0.033$), Seniority ($\beta = 0.015$, $t = 0.552$, $p\text{-Value} = 0.583$), Monthly Income ($\beta = -0.16$, $t = -0.356$, $p\text{-Value} = 0.723$), Employment category ($\beta = -0.015$, $t = -0.746$, $p\text{-Value} = 0.458$), Size of family ($\beta = 0.073$, $t = 1.340$, $p\text{-Value} = 0.184$)

$$\hat{y}_t = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_8x_8$$

$$\hat{y}_t = -0.754 + 0.030x_1 + 0.008x_2 + 0.164x_3 + 0.107x_4 + 0.015x_5 - 0.026x_6 - 0.015x_7 + 0.073x_8$$

It was found that education levels and status affect the appropriate financial planning model for retirement (Form 1, Savings and Investment in Provident Fund), statistically significant at the level of 0.05.

Table 7 Multiple Regression Analysis (Form 1 Savings and Investments in Provident Funds)

Personal factors	β	Beta	t	p-Value
x_1 Gender	0.030	0.050	0.473	0.637
x_2 Age	0.008	0.033	0.237	0.813
x_3 Education level	0.164	0.255	2.444	0.017*
x_4 Status	0.107	0.240	2.164	0.033*
x_5 Seniority	0.015	0.079	0.552	0.583
x_6 Monthly Income	-0.016	-0.045	-0.356	0.723
x_7 Employment category	-0.015	-0.86	-0.746	0.458
x_8 Size of family	0.073	0.139	1.340	0.184
Constant	-0.754		-2.717	0.008*

*Statistically significant at 0.05

Form 2 Savings and investments in civil service pension funds

In Table 8, There are the following findings: Gender ($\beta = 0.100$ t = 2.023 , p-Value = 0.046), Age ($\beta = 0.030$, t = 1.192 , p-Value = 0.237), Education level ($\beta = 0.049$, t = 0.933 , p-Value = 0.354), Status ($\beta = 0.010$, t = 0.265 , p-Value = 0.791), Seniority ($\beta = 0.008$, t = 0.356, p-Value = 0.723), Monthly Income ($\beta = -0.111$, t = -3.082, p-Value = 0.003), Employment category ($\beta = -0.011$, t = -0.702 , p-Value = 0.485), Size of family ($\beta = 0.034$, t = 0.805, p-Value = 0.423)

$$\hat{y}_t = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_8x_8$$

$$\hat{y}_t = -0.112 + 0.100x_1 + 0.030x_2 + 0.049x_3 + 0.010x_4 + 0.008x_5 - 0.111x_6 - 0.011x_7 + 0.034x_8$$

It was found that gender and monthly income significantly affected the appropriate financial planning model for retirement (Form 2, savings and investing in civil service pension funds), statistically significantly at 0.05.

Table 8 Multiple Regression Analysis (Form 2 Savings and Investments in Civil Service Pension Funds)

Personal factors	β	Beta	t	p-Value
x_1 Gender	0.100	0.202	2.023	0.046*
x_2 Age	0.030	0.158	1.192	0.237
x_3 Education level	0.049	0.092	0.933	0.354
x_4 Status	0.010	0.028	0.265	0.791
x_5 Seniority	0.008	0.048	0.356	0.723
x_6 Monthly Income	-0.111	-0.367	-3.082	0.003*
x_7 Employment category	-0.011	-0.077	-0.702	0.485
x_8 Size of family	0.034	0.079	0.805	0.423
Constant	-0.112		-0.513	0.609

*Statistically significant at 0.05

Form 3 Savings and Investments in Cooperative Stocks

In Table 9, There are the following findings: Gender ($\beta = 0.161$, $t = 1.690$, $p\text{-Value} = 0.095$), Age ($\beta = -0.078$, $t = -1.623$, $p\text{-Value} = 0.108$), Education level ($\beta = -0.001$, $t = -0.012$, $p\text{-Value} = 0.991$), Status ($\beta = 0.041$, $t = 0.549$, $p\text{-Value} = 0.584$), Seniority ($\beta = 0.126$, $t = 3.082$, $p\text{-Value} = 0.003$), Monthly Income ($\beta = -0.056$, $t = -0.810$, $p\text{-Value} = 0.420$), Employment category ($\beta = 0.012$, $t = 0.384$, $p\text{-Value} = 0.702$), Size of family ($\beta = -0.034$, $t = -0.408$, $p\text{-Value} = 0.684$)

$$\hat{y}_t = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_8x_8$$

$$\hat{y}_t = 0.003 + 0.161x_1 - 0.078x_2 - 0.001x_3 + 0.041x_4 + 0.126x_5 - 0.056x_6 + 0.012x_7 - 0.034x_8$$

It was found that seniority significantly affected the appropriate financial planning model for retirement (Form 3, savings and investing in cooperative stocks) at a statistically significant level of 0.05.

Table 9 Multiple Regression Analysis (Form 3 Savings and Investments in Cooperative Stocks)

Personal factors	β	Beta	t	p-Value
x_1 Gender	0.161	0.178	1.690	0.095
x_2 Age	-0.078	-0.226	-1.623	0.108
x_3 Education level	-0.001	-0.001	-0.012	0.991
x_4 Status	0.041	0.060	0.549	0.584
x_5 Seniority	0.126	0.438	3.082	0.003*
x_6 Monthly Income	-0.056	-0.102	-0.810	0.420
x_7 Employment category	0.012	0.044	0.384	0.702
x_8 Size of family	-0.034	-0.042	-0.408	0.684
Constant	0.003		0.006	0.995

*Statistically significant at 0.05

Form 4 Savings and Investments in Stocks/Securities

In Table 10, There are the following findings: Gender ($\beta = 0.041$, $t = 0.457$, $p\text{-Value} = 0.649$), Age ($\beta = -0.086$, $t = -1.897$, $p\text{-Value} = 0.061$), Education level ($\beta = 0.259$, $t = 3.079$, $p\text{-Value} = 0.003$), Status ($\beta = 0.027$, $t = 0.376$, $p\text{-Value} = 0.708$), Seniority ($\beta = 0.007$, $t = 0.168$, $p\text{-Value} = 0.867$), Monthly Income ($\beta = -0.035$, $t = -0.530$, $p\text{-Value} = 0.597$), Employment category ($\beta = -0.035$, $t = -1.204$, $p\text{-Value} = 0.232$), Size of family ($\beta = -0.081$, $t = -1.045$, $p\text{-Value} = 0.299$)

$$\hat{y}_t = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_8x_8$$

$$\hat{y}_t = -0.258 + 0.041x_1 - 0.086x_2 + 0.259x_3 + 0.027x_4 + 0.007x_5 - 0.035x_6 - 0.035x_7 - 0.081x_8$$

It was found that the level of education affected the appropriate financial planning model for retirement (Form 4, savings and investing in stocks/securities), Statistically significant at the level of 0.05.

Table 10 Multiple Regression Analysis (Form 4, savings and investing in stocks/securities)

Personal factors	β	Beta	t	p-Value
X_1 Gender	0.041	0.048	0.457	0.649
X_2 Age	-0.086	-0.265	-1.897	0.061
X_3 Education level	0.259	0.320	3.079	0.003*
X_4 Status	0.027	0.041	0.376	0.708
X_5 Seniority	0.007	0.024	0.168	0.867
X_6 Monthly Income	-0.035	-0.067	-0.530	0.597
X_7 Employment category	-0.035	-0.139	-1.204	0.232
X_8 Size of family	-0.081	-0.108	-1.045	0.299
Constant	-0.258		-0.650	0.518

*Statistically significant at 0.05

5. Discussion

According to the study of 97 samples, 79.38% of savings and investments in the form of bank deposits were intended to save for emergency spending, with 87.63 percent not defining a certain proportion. The 32.99% of savings from spending were planned in the nature of bank deposits, 61.86% in line with the research by (Sirilak & Chanjaras, 2016) a study of financial planning behavior for retirement of income earners between the ages of 22-60 in muang district, Udon Thani province, which found that most people chose to plan their retirement finances by depositing money with banks and needed more knowledge about retirement financial planning, accounting for 55.81%.

The readiness factors for preparing for retirement affect the most important level of retirement financial planning behavior. An average 3.51 sub-factors for the need for additional knowledge in retirement planning become the most impactful. The average of 3.67 is consistent with the research of (Penprapa, 2015) which studied pre-retirement preparation as an action plan or practice. To prepare for life after retirement, therefore, there must be 6 different aspects of preparation: 1) mental preparation, 2) physical preparation, 3) property preparation, 4) preparation for leisure activities, 5) family relationship preparation, 6) housing preparation. Those who are well prepared will be able to live happily with after retirement with good quality of life.

As for current revenue size factors, it has a moderate effect on retirement financial planning behavior. An average 3.22 regular income sub-factors including professional fee salary have the greatest impact. Average 4.15

In current cost factors, it has a moderate effect on retirement financial planning behavior. An average 3.15 daily expense sub-factors such as meals Clothing, utility bills, household expenses have the greatest impact at the average 3.80.

In debt obligation factors, it affects financial planning behavior for retirement to a small extent. An average 2.33 loan sub-factors have the greatest impact Average 3.06.

For return factors from savings, it has a moderate effect on retirement financial planning behavior. An average 3.12 certainty factors of the level of income expected after retirement, it has a moderate effect on retirement financial planning behavior. With the average 3.31.

A multiple regression analysis was applied to test the relationship between independent variables, personal factors of personnel at Rajamangala University of Technology Tawan-ok, Chanthaburi Campus and appropriate financial planning for retirement. The researchers gave individual factors consisting of eight variables: gender, age, education, status, seniority, employment type, with monthly income and family size, it was found that there are four suitable savings and investment models: 1) Savings and investments in provident funds, statistically significant at 0.05, R Square values are 0.178 2) Savings and investments in civil service pension funds, the R Square value is 0.268 3) Savings and investments in cooperative stocks statistically significant at 0.05, R Square is 0.186, and 4) Savings and Investments in Stocks/Securities Statistically significant at 0.05, R Square value is 0.185, corresponding to (Patnee, 2012) a study of personal finance planning for retirement as a case study of teachers affiliated with Bangkok schools, finding that the main savings model is the civil service pension, investment in bank deposits, cooperative stock investments.

6. Suggestions

1. Agencies should support or consider promoting similar welfare in ways that are appropriate to the research findings, including: Savings and Investments in Provident Fund, Savings and investments in civil service pension funds, Savings and Investments in Cooperative Stocks and Savings and Investments in Stocks/Securities
2. should give importance and knowledge in retirement of the personnel in Rajamangala University of Technology Tawan-ok, Chanthaburi Campus
3. Future research may explore the subject of personal financial planning in other areas, such as: proper spending planning, Investment planning under risk as well as giving importance to financial planning for retirement.

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