

Risk Tolerance as A Moderation of Financial Literacy and Lifestyle on Old Age Financial Planning of Civil Servant in The Environment of The Mataram University Rectorate

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ABSTRACT:Old age financial planning must consider various factors, such as retirement age, estimated monthly expenses in retirement, life expectancy, current and projected income until retirement which determines the ability to save, assets and investments already owned, and the impact of inflation on future purchasing power. Future, as well as the level of investment return. This research is causal associative research, this research uses a quantitative approach. The population used in this research were employees within the Rectorate of the University of Mataram, 67 Civil Servants. The saturated sampling method or total sampling is a sampling technique in which all members of the population are used as samples. In this questionnaire, respondents' answers were measured using a 6-point Likert scale: with ratings of 1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (somewhat agree), 5 (agree), 6 (strongly agree). The Partial Least Square-Structural Equation Model (PLS-SEM) with smart PLS 3.0 software was used to analyze the research data. The study's findings indicate that financial literacy is found to have a positive and significant impact on old-age financial planning among Rectorate employees at the University of Mataram. This indicates that as financial literacy levels increase, so do activities relate to planning for retirement. Conversely, lifestyle does not exhibit a significant influence on old-age financial planning for these employees. Furthermore, the interaction between financial literacy and risk tolerance weakens the effect of financial literacy on retirement financial planning, implying that higher risk tolerance diminishes the impact of financial literacy on planning for retirement. However, risk tolerance does not moderate the influence of lifestyle on old-age financial planning, indicating that the interaction between lifestyle and risk tolerance does not significantly affect retirement financial planning for Rectorate employees at Mataram University.

KEYWORDS :*Risk Tolerance, Financial Literacy, Lifestyle, Old Age Financial Planning*

I. INTRODUCTION

The level of life expectancy of a country's population not only reflects the quality of life of its people but is also one of the main benchmarks in evaluating the progress and level of development of a country. In Indonesia, based on data compiled by the Central Statistics Agency (BPS) in 2021, population life expectancy has reached 69.7 years for men and 73.55 years for women (Jayapura District Health Service, 2019). However, for Civil Servants (PNS), the enactment of Government Regulation Number 11 of 2017 concerning the Management of Civil Servants (PP 11/2017) sets the retirement age for Civil Servants at between 58 and 65 years, depending on the position held by each individual (RI Cabinet Secretariat, 2017). As a result, when a civil servant enters retirement, they are faced with the fact that their sources of income are reduced, which can then create various financial challenges during retirement. Therefore, there must be financial planning for old age long before retirement comes.

Old age financial planning is the current behavior of individuals in planning and managing finances for old age (Aulia et al., 2019). Careful financial planning will produce a financial plan that is detailed and easy to understand. With financial planning, a person can determine their financial goals and design strategies to realize these goals (Saputri&Iramani, 2019). Old age financial planning must consider various factors, such as retirement age, estimated monthly expenses in retirement, life expectancy, current and projected income until retirement which determines the ability to save, assets and investments already owned, the impact of inflation on future purchasing power. future, as well as the level of investment returns (Amelia &Suharjo, 2017).

A survey conducted by Manulife Investment Management shows that the average income of Indonesian people when they retire is only 20 percent of their current income or even lower (Santi, 2022). Based on PT Taspen (Persero) data regarding the amount of civil servant pension benefits, the income received can even be only 40% of the basic salary while serving as a civil servant (PT Taspen (Persero), 2018). Of course this is a significant decrease in income. Therefore, careful financial planning for the future is important when facing retirement. The government has created a mandatory program regarding the management of civil servant pension funds which is deducted from 8% of the monthly salary they receive while they are civil servants. The use of APBN funds for payment of civil servant pension programs is regulated in Minister of Finance Regulation Number: 82/PMK.02/2015 concerning Procedures for Calculation, Provision, Disbursement and Accountability of Pension Expenditure Funds Implemented by PT Taspen (Persero) and PT Asabri (Persero).

Many people attribute the lack of awareness of the importance of financial planning for old age to various factors, one of which is a person's level of financial literacy. Financial literacy means understanding how much knowledge a person has about financial concepts in general. Financial literacy also includes a person's ability and confidence in managing their own finances. This includes the ability to make the right decisions in short-term financial management, plan long-term finances effectively, and respond quickly to any changes in economic conditions (Financial Services Authority, 2017). The indicators for measuring financial literacy according to the OECD (2016) are determined by three indicators, namely financial knowledge, financial behavior and financial attitude.

Several studies have shown that financial literacy has a positive effect on old age financial planning, for example research conducted by van Rooij et al. (2012), Fadila & Usman (2022) and Rahmarina (2022) which show that someone with high financial literacy has better involvement in retirement planning. This is supported by the Two Process Learning Theory which shows that someone with high financial literacy will be better able to understand and analyze financial information carefully. In other words, financial literacy can increase individual capacity in reflective thought processes related to financial planning.

However, it should be noted that a person's financial literacy is not always directly related to their ability to carry out effective financial planning. Research by Tan & Singaravelloo (2020), which studied Malaysian government officials, highlighted that despite having a high level of financial literacy, their financial planning skills are still relatively standard. Likewise, research conducted by Mendari & Soejono (2019) shows that the average lecturer does not have a retirement financial plan. Therefore, apart from financial literacy, there are other variables that influence old age financial planning. This shows that there is a research gap because there are differences in the research results found.

II. LITERATURE REVIEW

Based on research by Assyifa and Subagyo (2023), apart from financial literacy, there are lifestyle variables that also influence financial planning for old age. A person's lifestyle level has a significant impact on their retirement financial planning. Lifestyle can be defined as a person's patterns or habits in their daily lives which are reflected in their activities, interests and opinions about how to use money and manage their free time. Lifestyle is often also associated with a person's social status based on their personality, following the latest fashion trends as the main thing in fulfilling daily needs (Utami & Marpaung, 2022). According to Setiawan (2022), there are several indicators to serve as a reference in measuring a person's level of lifestyle, namely activities, interests, views and character.

A consumptive lifestyle, where a person tends to spend excessively on their income to fulfill short-term desires, can hinder their ability to save and invest for old age. On the other hand, a frugal lifestyle and being wise in managing expenses can help individuals to allocate more resources into financial planning for their old age. Additionally, a healthy lifestyle can also have a positive impact, as lower health care costs can help reduce financial burdens when entering retirement. This is in line with research by Assyifa & Subagyo (2023), Amani & Magava (2022), Dewi (2018), Karlina (2015) which shows that lifestyle influences a person's financial planning. In addition, research conducted by Millati (2022) shows that lifestyle has a significant influence on retirement financial planning because the lower a person's lifestyle, the better the individual plans his retirement. Therefore, awareness and appropriate lifestyle management can help individuals plan more stable and sustainable retirement finances. However, this is in contrast to research by Utami & Marpaung (2022), Lastri (2021) and Rizi (2021) which found no influence of lifestyle on individual financial management in their retirement financial planning. With the differences in research results found, this shows that there is a research gap in this study.

Apart from financial literacy and lifestyle, there are other factors that influence financial planning for old age. Research by Saputra & Murniati (2021) reveals that other factors such as financial behavior, socio-demographic characteristics, and risk tolerance also have a significant impact on a person's ability to carry out good retirement financial planning. Risk is uncertainty regarding future events that will produce desired or undesirable outcomes (Griffin, 2002).

In financial decision making, financial risk tolerance is generally defined as the maximum level of uncertainty that a person can still accept when making choices related to finance (J. Grable & Joo, 2004). In examining an individual's level of risk tolerance, there are two indicators used, namely investment preferences and fear of risk (Saputra, 2021). Investment preference indicators reflect individuals' preferences for the types of investments or financial assets they choose to hold or allocate their funds to. Meanwhile, the fear of risk indicator measures the extent to which individuals feel anxious or afraid of potential losses in their investments or financial decisions.

Individuals with adequate financial literacy tend to make risk factors the main consideration in making investment decisions. High financial literacy gives individuals the ability to better understand the available investment instruments (Permanasari et al., 2020). With deeper knowledge, individuals can conduct more careful risk analysis, assess potential gains and losses, and make more informed investment decisions. (Taujiharrahan&Pangestuti, 2022). The findings in Ruwanda's (2020) research which states that the higher an individual's level of risk tolerance, the greater their courage in making investment decisions, is in line with the understanding that good financial literacy and high risk tolerance can influence each other in the retirement financial planning process. This is in line with Prospect Theory where a high level of risk tolerance can make individuals better prepared to face fluctuations in the value of their investments, and they may be braver in choosing investments that are suitable for them.

III. METHOD

This research is causal associative research, namely research that examines the relationship of one or two other variables (Sugiyono, 2014). Then this research uses a quantitative approach, which is a type of research that explains phenomena by collecting numerical data which is analyzed using mathematical (statistical) based methods (Creswell, 2014). The population used in this research were employees within the Rectorate of the University of Mataram, 67 Civil Servants. The saturated sampling method or total sampling is a sampling technique in which all members of the population are used as samples. In this questionnaire, respondents' answers were measured using a 6-point Likert scale: with ratings of 1 (strongly disagree), 2 (disagree), 3 (somewhat disagree), 4 (somewhat agree), 5 (agree), 6 (strongly agree). Next, the Partial Least Square-Structural Equation Model (PLS-SEM) with smart PLS 3.0 software was used to analyze the research data.

IV. RESULTS

The outer loading value is used as a measure that describes the magnitude of the correlation between each measurement item (indicator) and the variable. Rule of thumb according to Chin, (1998), a loading factor value above 0.7 is said to be ideal, which means the indicator is valid, however, values above 0.5 are acceptable so values below 0.5 must be removed from the model. Apart from that, valid indicators can be seen from validation by comparing the t statistic with the t table value where the t statistic value must be \geq t table. To see the t table, a significance level of 5% is used and df is the number of respondents minus the number of variables (independent and dependent). The outer loading values in the simulation model can be seen in the following figure and table:

Table 1. Outer Loading

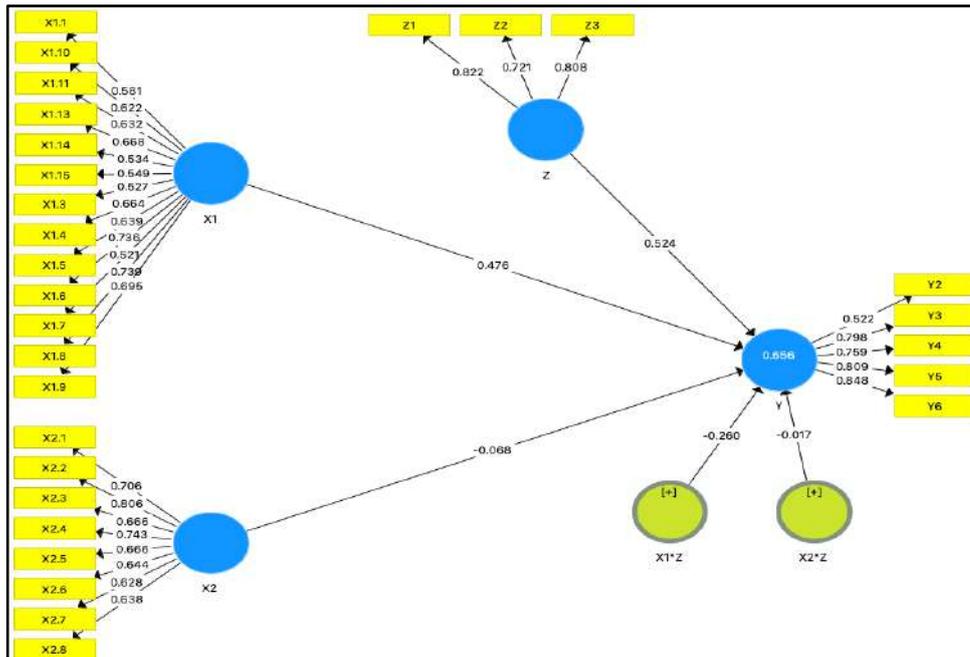


Figure 1. Outer Loading

Table 1. Convergent Validity Test (Outer Loading)

No	Variables	Item	Outer Loading	
1.	Financial Literacy (X1)	X1.1	0,581	Valid
		X 1.3	0,527	Valid
		X1.4	0,664	Valid
		X1.5	0,639	Valid
		X1.6	0,736	Valid
		X1.7	0,521	Valid
		X1.8	0,739	Valid
		X1.9	0,695	Valid
		X1.10	0,622	Valid
		X1.11	0,632	Valid
		X1.13	0,668	Valid
2.	Lifestyle (X2)	X2.1	0,706	Valid
		X2.2	0,806	Valid
		X2.3	0,656	Valid
		X2.4	0,743	Valid
		X2.5	0,666	Valid
		X2.6	0,644	Valid
		X2.7	0,628	Valid
3.	Old Age Financial Planning (Y)	Y2	0,522	Valid
		Y3	0,798	Valid
		Y4	0,759	Valid
		Y5	0,809	Valid
		Y6	0,848	Valid
4.	Risk Tolerance (Z)	Z1	0,822	Valid
		Z2	0,721	Valid
		Z3	0,808	Valid

According to Chin, (1998), a loading factor value above 0.7 is said to be ideal, which means the indicator is valid, however, a value above 0.5 is acceptable. So, Table above shows that all the indicators in the model are declared valid because the factor loading value of each indicator seen in the original sample (O) column is > 0.5 with the lowest value being the financial literacy variable indicator whose value is still above 0.5, namely 0.521. The highest outer loading value in the model is in the old-age financial planning variable

indicator which also has a value of 0.848.

Composite Reliability shows a measure of how far the reliability of variables with a score > 0.7 is. Meanwhile, the Average Variance Extracted (AVE) test can show the ability of the variable value to represent the original data score, where if the AVE value is > 0.5 , it shows that the measure of convergent validity is good. The Composite Reliability and Average Variance Extracted values are presented in the following table:

Table 2. Average Variance Extracted and Composite Reliability

Variabel Laten	Composite Reliability	Cronbachs Alpha	Average Variance Extracted (AVE)
Financial Literacy	0,872	0,893	0,594
Lifestyle	0,894	0,878	0,575
Old Age Financial Planning	0,804	0,867	0,572
Risk Tolerance	0,701	0,827	0,616

In the table above, the Composite Reliability value for all research variables is more than 0.7, which indicates that the level of reliability is acceptable. Overall, the items that measure variables are consistent in measuring these variables. Meanwhile, the AVE value for all research variables is more than 0.5, which means that the large variation in all items contained in this research variable meets the requirements for good convergent validity (Ghozali and Latan, 2015).

From the various analytical test results that have been presented previously, the results of testing several hypotheses that have been explained previously were obtained. The results of hypothesis testing are presented in the following table:

Table 3. Hypothesis Test Results

Hypothesis	Relations	Original Sample	T Statistics	P Values	
H1	X1 - Y	0,476	4,187	0,000	Positive and Significant
H2	X2 - Y	-0,068	0,574	0,566	Not significant
H3	X1 *Z	-0,260	2,078	0,038	Negative and Significant
H4	X2 *Z	-0,017	0,178	0,859	Not significant

Based on Figure 4.1 and Table 4.12 above, the relationship between variables (hypothesis test results) can be explained as follows:

1. Financial literacy has a positive and significant effect on old-age financial planning with a coefficient value of 0.476 and a P value of $0.000 < 0.05$. So, the first hypothesis (H1) is accepted. This means that the higher the financial literacy one has, the greater the financial planning activities for one's future.
2. Lifestyle has no significant effect on old-age financial planning with a coefficient value of -0.068 and a P value of $0.566 > 0.05$. So, the second hypothesis (H2) is rejected. This means that lifestyle does not have a significant influence on old-age financial planning.
3. Risk tolerance weakens the influence of financial literacy on retirement financial planning with a coefficient value of -0.260 and a P value of $0.038 > 0.05$. So, the third hypothesis (H3) is rejected. This means that the interaction between financial literacy and risk tolerance will significantly reduce old-age financial planning. This type of moderator variable is a Quasi Moderator (Quasi Moderator) where the risk tolerance variable is on the retirement financial planning variable in the first estimate and there is an interaction effect of financial literacy*risk tolerance in the second estimate and has significance on the retirement financial planning variable.
4. Risk tolerance is unable to moderate the influence of lifestyle on financial planning for old age with a coefficient value of -0.017 and a P value of $0.859 > 0.05$. So, the fourth hypothesis (H4) is rejected. This means that the interaction between financial literacy and risk tolerance does not have a significant influence on retirement financial planning. Homologizer Moderation (Potential Moderation), where there is an influence of the risk tolerance variable on the old-age financial planning variable in the first estimate and the influence of the lifestyle * old-age financial planning interaction in the second estimate, neither of which has a significant effect .

The R-Square test is used to determine the proportion or percentage of total variation in the dependent variable that is explained by the independent variable. The results of the R-Square values are presented in the table below:

Table 6. R Square Test Results

Variable	R Square	R Square Adjusted
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Old Age Financial Planning	0,656	0,628
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Table above shows that the magnitude of the influence of financial literacy and lifestyle on financial planning for old age is 65.60 percent which is in the high category and the rest is influenced by variables outside the model such as financial knowledge, financial attitudes, and others.

V. DISCUSSION

The Influence of Financial Literacy on Old Age Financial Planning

The results show that financial literacy has a positive and significant effect on old age financial planning. This means that the higher the financial literacy one has, the greater the financial planning activities for one's future. Financial literacy includes knowledge of financial concepts in general and a person's ability to utilize all aspects of finance for daily life, including understanding or ability to measure related financial concepts that implement accountability well (Pratama, 2023). Financial literacy can influence a person's way of thinking in dealing with financial conditions and influence strategic decision making regarding finances and better management for business owners (Pratama, 2023). Good financial planning can make it easier for individuals to achieve their financial goals, including planning for the future. Financial literacy allows individuals to make accurate estimates of income and expenses, so they can plan better and avoid financial difficulties (Arum, 2024).

Based on the Two-Process Learning Theory, financial literacy has a positive and significant effect on old-age financial planning. This theory states that learning occurs in two processes: explicit learning and implicit learning. Financial literacy, which involves knowledge and the ability to apply it, plays an important role in both of these processes (Hariyani et al., 2022). This shows that financial literacy has a positive influence on old age financial planning, both in terms of personal financial management and in terms of long-term financial management. Previous research shows that financial literacy has a significant influence on financial planning, including old age financial management. Studies by Lusardi and Mitchell (2011), Røij et al (2011), Kimiyaghalam, Mansori and Safari (2017), and Hassan et al (2016) all found a positive and economically meaningful relationship between financial literacy and retirement planning (Sobaya et al., 2016).

The Influence of Lifestyle on Financial Planning for Old Age

The results show that lifestyle has no significant effect on old age financial planning. This means that lifestyle does not have a significant influence on old age financial planning. Lifestyle does not always have a direct or significant influence on financial planning for old age because there are several factors that differentiate these two aspects. Lifestyle tends to be related to daily preferences and habits that focus more on aspects such as hobbies, interests or social activities. Meanwhile, old age financial planning is more related to long-term financial goals, such as retirement savings, investments and pension insurance. Lifestyle is often influenced by emotional factors, social and cultural trends that can change over time, while retirement financial planning is based more on more stable and planned financial considerations. Additionally, financial decisions related to retirement tend to require more careful planning and strategy, which may not be completely influenced by current lifestyles. Therefore, although lifestyle can influence general spending and savings, it does not always directly influence more distant retirement financial planning.

Based on the Planned Behavior theory, lifestyle does not have a significant effect on old age financial planning for several reasons. This theory emphasizes three main variables that influence behavior, namely values or beliefs, social values, and ability or control. Lifestyle, as a variable that includes activities, interests and individual opinions in spending money and allocating time, does not directly influence old age financial planning if it is not linked to individual ability or control (Maulida et al., 2018). An unfulfilled assumption is that lifestyle directly influences retirement financial planning without considering other factors such as financial knowledge, financial literacy, and individual values or beliefs regarding the importance of financial planning for the future. Planned Behavior theory highlights that financial behavior, including retirement financial planning, is influenced by a combination of beliefs, social and ability or control. Therefore, lifestyle alone is not enough to explain old-age financial planning without considering these variables (Maulida et al., 2018).

The Influence of Financial Literacy on Old Age Financial Planning Moderated by Risk Tolerance

The results show that risk tolerance weakens the influence of financial literacy on retirement financial planning. This means that the interaction between financial literacy and risk tolerance will significantly reduce old age financial planning. Financial risk tolerance plays an important role in moderating the influence of financial literacy on retirement financial planning. Research by Harahap et al. (2023) show that financial literacy can mediate financial risk tolerance, which in turn influences savings behavior and retirement financial planning. Financial risk tolerance is an individual's ability to respond to changes in their

financial condition in different ways, such as by reducing expenses or increasing income. In the context of retirement financial planning, high risk tolerance can affect an individual's ability to plan and manage finances more effectively, including in terms of investing and managing retirement funds.

Financial risk tolerance plays an important role in moderating the influence of financial literacy on retirement financial planning, in accordance with Prospect Theory. This theory emphasizes that financial behavior can be influenced by two processes, namely the aversion process (avoiding losses) and the acquisition process (making profits). In this context, financial literacy enables individuals to identify, analyze and utilize relevant financial information to make decisions that minimize risks and achieve financial goals. Research by Endru Dwi Saputra shows that financial risk tolerance has a significant influence on employee retirement financial planning at LLDIKTI Region VI Semarang (Saputra & Dwi, 2021). Financial literacy, which includes knowledge of investments, financing, and dividend policies, can mediate financial risk tolerance. Financial risk tolerance is defined as an individual's ability to respond to changes in their financial condition in different ways, such as by reducing expenses or increasing income. In the context of retirement financial planning, a high risk tolerance can affect an individual's ability to plan and manage finances more effectively. Individuals with a high risk tolerance may be more likely to choose to invest in assets that have the potential to provide high returns, while individuals with a lower risk tolerance may prefer to keep their finances stable.

The Influence of Lifestyle on Financial Planning for Old Age Moderated by Risk Tolerance

The results show that risk tolerance has no influence on lifestyle on financial planning for old age. This means that the interaction between financial literacy and risk tolerance does not have a significant influence on retirement financial planning. Lifestyle may reflect individual preferences or habits that have been established for a long time and may be difficult to change, while risk tolerance may change over time based on an individual's experience, knowledge or financial situation. Therefore, although individuals may have lifestyles that indicate high spending or consumption, their risk tolerance may vary, and this does not always correlate directly with their lifestyle.

Based on prospect theory, there are several reasons why risk tolerance may not be able to moderate the influence of lifestyle on retirement financial planning. First of all, this theory suggests that humans have a tendency to be more sensitive to losses than to gains in the context of financial decisions. In this case, an expensive or consumptive lifestyle may provide emotional satisfaction or "rewards" in the short term, which can be a strong incentive to maintain that lifestyle, regardless of the level of risk involved. Prospect theory suggests that individuals tend to make decisions based on how the options are presented, rather than based on absolute value. In a lifestyle context, the presentation of satisfaction or "value" derived from an expensive or consumptive lifestyle may be more appealing to individuals than the potential financial risks involved. In other words, a luxurious or consumptive lifestyle may be viewed as a "profitable choice" even though it may have risky financial consequences.

VI. CONCLUSION

1. Financial literacy has a positive and significant effect on old age financial planning. This means that the higher the financial literacy, the higher the financial planning activities for the future of Rectorate employees at the University of Mataram
2. Lifestyle has no significant influence on old-age financial planning. This means that lifestyle does not have a significant influence on old-age financial planning for Rectorate employees at Mataram University.
3. Risk tolerance weakens the influence of financial literacy on retirement financial planning. This means that the interaction between financial literacy and risk tolerance will significantly reduce retirement financial planning for Rectorate employees at Mataram University.
4. Risk tolerance is unable to moderate the influence of lifestyle on old age financial planning. This means that the interaction between financial literacy and risk tolerance does not have a significant influence on retirement financial planning for Rectorate employees at Mataram University.

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