International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 02, 2020
ISSN: 1475-7192

Personal Financial Behavior and Financial Life Cycle: Evidence from Indonesia

Yuliani* and Ade Maharini Adiandari

Abstract--- *Personal financial planning is a trend nowadays. Personal financial planning is related to someone behavior to manage to finance depend on stated objectives. Personal financial behavior is measured by six dimensions. There are emergency funds, debt level, savings rates, asset diversification, retirement preparation, and wealth distribution. This study aims to analyze the relationship between personal financial behavior based on the financial life cycle. The financial life cycle based on age consists of three stages, namely the stage of accumulating wealth, namely the age of 20-40 years, the stage of multiplying wealth, namely the age of 41-50 years and the stage of distributing wealth which is 51 years and above. Sampling criteria are respondents who have worked and have income. 203 respondents from Indonesia as research subjects with questionnaire data collection periods from the second week of January - the first week of March 2019. Test instruments have met the reliability and validity test criteria. Testing with Chi-Square in answering the hypothesis. The results of the study found that there was a significant relationship between the preferences of respondents about emergency funds based on the financial life cycle. The dimensions of savings rates, debt level, retirement preparation, asset diversification, and wealth distribution for respondents do not have a significant relationship based on the financial life cycle. Research contributions in theory that understanding the importance of personal financial management planning is one of the topics in financial management, especially personal finance behavior. Management finance behavior theory observes a personal behavior in planning to finance so that it prepares for financial freedom in old age. Practically the contribution of this research is needed for every individual who has financial goals in old age.*

Keywords--- *Emergency Funds, Debt Level, Saving Rates, Diversification Asset, Retirement, Wealth Distribution, Financial Life Cycle.*

I. INTRODUCTION

The behavior of personal finance is currently a quite serious topic in the world. Financial behavior is a reflection of a person's attitude or character in managing their finances (Rai, Dua, & Yadav, 2019). A broader study of financial topic is a discussion in financial management behavior that discusses cognitive aspects in making financial decisions (Amanah, Rahadian, &Iradianty, 2016). According to (Herdjiono & Damanik, 2016) someone who is able to manage their finances requires several efforts to make a budget about funds and conduct monitoring carried out on a daily basis.

Indonesia is a country with population growth in the last 10 years and recorded almost 300 million people, but if referring to the data published in the Indonesian National Financial Literacy Strategy or SNLKI, it shows that the Indonesian people rank lowest in terms of total savings and saving habits (OJK, 2017). This condition can be seen

Yuliani, Universitas Sriwijaya, Palembang, South Sumatera, Indonesia. Email: yulianisyapril@unsri.ac.id*
Ade Maharini Adiandari, Universitas Ngurah Rai, Denpasar, Bali, Indonesia.

DOI: 10.37200/IJPR/V24I2/PR200545
Received: 26 Dec 2019 | Revised: 10 Jan 2020 | Accepted: 21 Jan 2020

from the graph of the decline in Marginal Prospectity to Save (MPS) in the last five years and the increase in Marginal Prosperity to Consume (MPC). The public financial literacy index which is the result of the national survey in 2013 was 21.8% and increased by 29.7% in 2019. In accordance with the government's target that 2019 to 75% seems rather difficult to go towards a community that is well literate.

This study focuses on the financial management behavior that identifies people's knowledge of six dimensions, namely knowledge of the importance of emergency funds, holding deposits, managing debt, diversifying assets, preparing for retirement and understanding personal taxes and wealth distribution. This dimension is choosen based on the viewpoint of the financial planner, namely on the practical aspects associated with the financial life cycle.

Previous research begins with financial literacy as the foundation in financial planning that leads to financial satisfaction. Previous research has discussed a lot about the effect of financial literacy on financial satisfaction (Arifin, 2018; Hadi&Dewi, 2019; Hira &Mugenda, 1998; Xiao & Porto, 2017) while this study focuses more on financial literacy related to the financial life cycle. The financial life cycle refers to the life-cycle theory developed by Modigliani in 1957. There are three cycles in finance, namely the stage of accumulating wealth, multiplying wealth, distributing wealth (Suwito, 2018). Each of these stages is reflected in human age.

This paper consists of four parts. First is the background. The second is part of the literature review, the third discusses the methodology, the four results and subsequent findings are the discussions and final reference.

II. LITERATURE REVIEW

Financial Management Behavior

One of important concept in financial science is a discussion of a person's behavior in managing their finances. This concept of behavior is a topic in the financial management behavior. Financial management in the context of *corporate finance* has the main goal is to increase the value of the company reflected in the prosperity of shareholders. The personal finance context of the goal of finance is to maximize wealth towards financial freedom. The goal of achieving financial freedom is learning about personal financial planning. Financial behavior is the science of managing finance that combines behavioral and cognitive aspects from psychological theory, conventional economics, and finance which explains why people make irrational financial decisions (Amanah et al., 2016). Financial behavior can also be interpreted about human behavior in managing money (Xiao & Porto, 2017).

The development of finance behavior in the business and academic world in 1990 (Herdjiono&Damanik, 2016). The important thing in financial behavior leads to a person's behavior towards financial management as responsibility for themselves and their families. Therefore the financial management behavior discusses a person's ability to plan, budget, examine, manage, control, search and store daily financial funds and the emergence of this behavior is the impact of the high desire of someone to meet their needs according to their income level owned (Herdjiono&Damanik, 2016).

According to (Dew & Xiao, 2011) there are four important things in the financial management behavior, namely consumption, cash-flow management, saving and investment and credit management. Consumption or consumption is a routine expenditure for individuals and families.

DOI: 10.37200/IJPR/V24I2/PR200545
Received: 26 Dec 2019 | Revised: 10 Jan 2020 | Accepted: 21 Jan 2020

The role of the financial management behavior related to consumption is how one manages his finances related to how to buy goods and services and why to purchase these goods and services. Consumption management behavior is important because for someone who is wasteful and consumptive can lead to failure in the financial management behavior.

Cash-flow management is one of the financial foundation that must be considered in financial behavior. Cash flow or cash flow consists of two parts, namely cash inflow and cash outflow.A person must be able to create a positive cash flow or surplus in the context of financial behavior. A surplus condition is created if every month or every year someone is able to have a level of income that is greater than expenditure. Surplus conditions are mandatory to create a good and prosperous future (Raharjo, 2015). Cash flow management can be measured from how to pay bills on time or not, have records and proof of each expenditure on a regular basis and prepare the right budget according to needs.

Saving and investment are two different things. Saving is short-term, medium-term and long-term, for example, someone who has a savings account in banking is only for transactions, providing a sense of calm, anticipating if there are unexpected needs.

Savings that tend not to expect returns or returns. Investment is a sacrificing activity for consumption to be enjoyed in the future so that investment is defined as allocating funds to a number of investment products in both financial assets and real assets in the hope of getting a return in the future.

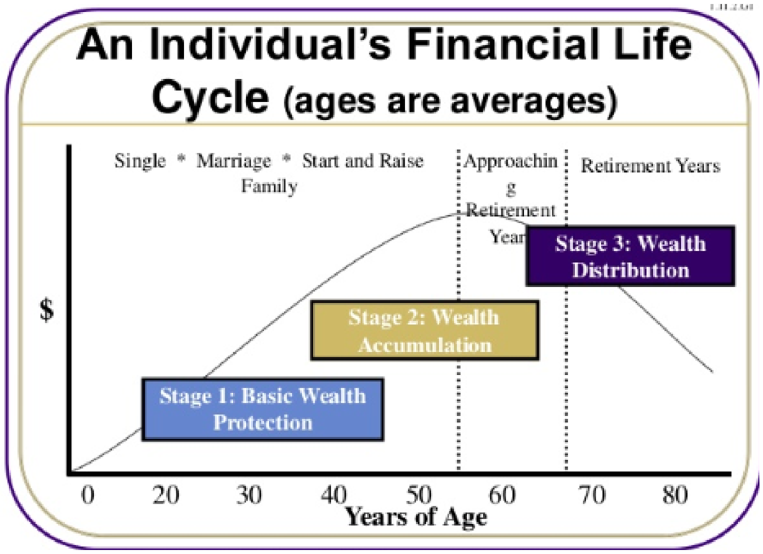
Credit management or how someone in managing debt. The type of debt is good debt and bad debt (Raharjo, 2015). The type of good debt is debt that when paid off, the value of the asset purchased is greater than the amount of the loan plus interest, while bad debt is a debt that makes a person poor because, in addition to the assets down, a lot of costs are needed for the asset. Therefore debt management is an important factor towards success in the financial management behavior.

The concept of financial planning in the module of the fundamentals of financial planning (FPSB, 2013) has six dimensions that one must consider in order to successfully prepare a financial plan. These six dimensions are having an emergency fund, holding deposits, managing debt, diversifying assets, preparing for retirement, understanding personal taxes and distributing wealth.

Life-Cycle in Finance

Beginning with the Life-cycle hypothesis was developed by Franco Modigliani in 1957. Furthermore, the life-cycle hypothesis became a theory developed by Richard Brumberg. This life-cycle theory is the basis of life-cycle in finance. This theory states that individuals try to expedite consumption during their lifetime, borrow when they have low income and save for high income.

Life-cycle in finance has been applied in business and academia through research in the field of personal finance. The theory explains that the point of view of one's financial assets will be allocated in terms of time and age. Age of a person reflects the period or period in preparing a financial plan. The financial life cycle appears in the graph below:



Source: https://www.slideshare.net/bogeybear/life-cycle-of-financial-planning-63193518

Figure 1: Financial Life Cycle

The graph above gives the stage or cycle of personal financial life. There are three important stages in the management of personal finance, namely the first stage is the stage of accumulating wealth, namely at the age of 20-40 years, the second stage is multiplying wealth, namely, age 41-50 years and finally or stage 3 is distributing wealth that is above 55 years. Someone when they are 20-40 years old they must have: investment, the debt level is more focused on good debt, has both life and general insurance, prepares pension funds and has an asset portfolio that is an investment in both financial assets and real assets. Stage 2, someone has begun to enter the early age, which must be considered is the diversification of assets owned to minimize risk. In addition, at this stage, it has begun to prepare the distribution of wealth in the form of inheritance. Stage 3 retirement where someone who does not have a main income while living standards still continue. The most important thing is the cost of health so that at this stage there are no installments. Based on the description above, the hypothesis proposed in this research are:

H_1: There is a significant relationship between emergency funds based on the financial life cycle

H_2: There is a significant relationship between saving rates based on the financial life cycle

H_3: There is a significant relationship between the level of debt based on the financial life cycle

H_4: There is a significant relationship between asset diversification based on the financial life cycle

H_5: There is a significant relationship between retirement preparation based on the financial life cycle

H_6: There is a significant relationship between tax and distribution of wealth based on the financial life cycle

III. METHODOLOGY / MATERIALS

The scope of research is quantitative and included in survey research. The study sample used a purposive technique with the criteria of respondents who had income and were willing to participate in answering items from the instrument, namely the questionnaire. Data collection for three months, namely January-March 2019. Based on the predetermined time collected, there were 203 respondents.

DOI: 10.37200/IJPR/V24I2/PR200545
Received: 26 Dec 2019 | Revised: 10 Jan 2020 | Accepted: 21 Jan 2020

Operationalization of variables measured by six dimensions, namely emergency funds, deposit rates, savings rates, asset diversification, retirement preparation, tax knowledge, and wealth distribution. This dimension refers to module 1 issued by the institution (FPSB, 2013).

Emergency funds are funds that have been allocated separately in an effort to meet needs that are very basic in nature. Emergency fund function so that one does not have to be forced to sell his assets when facing an emergency. Ideally, the proportion of emergency funds is 3-6 months from monthly expenditure (FPSB, 2013). There are four statements for measuring emergency funds using a 5 point Likert with point 5 as strongly agree and 1 indicating strongly disagree. Statements about emergency funds are related to 1) the importance of emergency funds, 2) have sufficient amount of emergency funds, 3) other funding sources, 4) other assets.

The level of debt is an obligation that is a financial burden and must immediately be repaid. Debt includes consumptive and productive debt. The ideal ratio of a person's debt ratio is at least 30% of income owned. Measurement of this variable uses four statements with a 5 point Likert scale, namely, point 5 for opinions strongly agree and 1 for opinions strongly disagree. The statement used to measure the level of debt is related to 1) concern with debt, 2) more productive or consumptive debt, 3) ability to repay debt, 4) the ability to pay off debt.

Deposits are accounts in the form of demand deposits, savings and time deposits. The ideal ratio is a minimum of 10% per month for savings accounts. The deposit rate is measured by 5 Likert scales namely point 5 to strongly agree and point 1 to strongly disagree. Savings level variable indicators with four statements, namely 1) liquid assets above net worth, 2) liquid assets can be immediately converted into cash, 3) have a savings activity of at least 10% per month, 4) have sufficient savings amount.

Asset diversification is an alternative to minimizing risk. The risks faced are a systematic risk and unsystematic risk. The ratio of unsystematic can be minimized by diversifying. Measurement of these variables with 5 Likert scales, namely 5 for strongly agree statements and 1 for strongly disagree statements. Variable indicators use four statements about 1) composition of assets, 2) reduce financial risk, 3) value of investment assets greater than net worth, 4) management of asset diversification.

Retirement preparation is the fifth dimension. Retirement is the final period of productivity as an employee including the income received will decrease. Retirement preparation must be planned because when it is not optimal income a person can still live properly in accordance with the standard of cost while still productively working. Measurement of this variable with four indicators namely 1) asset investment, 2) total funds, 3) financial goals, 4) additional funds. This indicator is measured by a 5 point Likert scale where point 5 for statements strongly agree and 1 for statements strongly disagree.

Taxes and wealth distribution are dimensions that must be considered because wealth owners can still control and supervise their assets. However, if the owner has died, the assets left behind are not a problem for the heir. Statements about taxes and wealth distribution use four indicators, namely 1) reporting assets and debts in taxes, 2) understanding personal taxes, 3) distribution of taxable assets and not 4) distribution of property ownership. Measurement of variables using a 5 point Likert scale where point 5 states strongly agree and point 1 for statements strongly disagree.

DOI: 10.37200/IJPR/V24I2/PR200545
Received: 26 Dec 2019 | Revised: 10 Jan 2020 | Accepted: 21 Jan 2020

IV. RESULTS AND FINDINGS

Descriptive statistics explain the characteristics of the research respondents. The demographic data of the respondents are shown in Table 1. This study which became the respondents were more than 50% female dominant. Women are more likely to be active in managing their finances because management behavior will be more meaningful in the goal of achieving prosperity in old age. The age of the respondents almost had the same proportion, namely the age of 20-50 years. At this age period, it belongs to the stage of collecting and multiplying wealth. The age of respondents above 51 years as much as 16% reflects that this condition indicates that respondents enjoy financial freedom.

Based on education level as many as 112 respondents or 55% are masters. This means that the level of education is sufficient to support good financial planning. Married respondents were 88% or as many as 179 people. This means that financial planning on respondents who are married will be different from when they are single. This is because total income has come from two sides, namely income with a partner. The employment status of the respondents is permanent employees with an annual income level above Rp.15 million and a work period of more than 10 years. Overall, the demographics of the respondents in this study were individuals who should have a good financial plan because at the age above 40 years is the cycle of accumulating wealth that has been obtained before the age of 30 years.

Table 1: Demographic Details of the Respondents

Demographic	N	%
Gender		
Male	84	41,40
Female	119	58,60
Age		
Between 20 and 40 years	86	42,36
41 – 50 years	84	41,38
Above 51 years	33	16,26
Education		
Bachelor	5	2,50
Graduate	37	18,20
Master	112	55,20
Doctor	49	24,10
Marital Status		
Married	179	88,20
Unmarried	24	11,80
Work Status		
Permanent	182	89,70
Contract	10	4,90
Self-work	11	5,40
Income (Per annum)		
Between 5 and 10	78	38,40
Above 15	125	61,60
Long of work		
Between 5 and 10 years	40	19,70
Above 10	163	80,30

Source: The authors

DOI: 10.37200/IJPR/V24I2/PR200545
Received: 26 Dec 2019 | Revised: 10 Jan 2020 | Accepted: 21 Jan 2020

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 02, 2020
ISSN: 1475-7192

Collecting research data using instruments in the form of questionnaires. The testing of the research instrument with the validity and reliability of each variable and item statement is shown in Table 2. Refer to Table 2 to test validity with Pearson product moment correlation with valid conditions if the value if r ≥ 0.30 and the correlation sig value ≤95% or at α = 0.05> 0.3. Reliability testing with the Cronbach Alpha method with a cut-off point is declared reliable if ≥0.60. It appears in Table 2 that the value of validity and realibity instruments has met the requirements.

Table 2: Reliability and Validity Instrument

Question items	Item to total	Cronbach's Alpha
Emergency Funds:		
dd1	0,316	0,611
dd2	0,691	
dd3	0,814	
dd4	0,791	
Total Debt:		
th1	0,744	
th2	0,613	0,634
th3	0,729	
th4	0,671	
Saving Level:		
sl1	0,615	
sl2	0,768	0,751
sl3	0,860	
sl4	0,770	
Diversification Assets:		
da1	0,768	
da2	0,754	0,705
da3	0,750	
da4	0,635	
Retirement Prepare:		
rr1	0,765	
rr2	0,780	0,667
rr3	0,676	
rr4	0,631	
Tax and Wealth Distributions:		
tw1	0,530	0,654
tw2	0,761	
tw3	0,623	
tw4	0,676	

Source: The authors

Emergency funds are emergency funds that must be owned by each individual. This amount of funds can be calculated based on expenditure per month. Provisions that are right as a cut off from the number of emergency funds are 3-6 months from expenses. This means that the period of 3-6 months will cover a person's important needs in the event of unexpected conditions. Such conditions, for example, the salary paid is not on time while the installments must be paid on time.

Following in Table 3, cross tabulation between variables towards finance life cycle. Emergency funds are in a low category at the age of 20-40 as many as 33 people and age 41-50 as many as 37 people and more than 51 are 2 people. Based on the high category there are 53 people. The importance of having emergency funds for respondents is when finance life cycles at the age of 20-40. This is because at the age of 20-40 there are still many funds that

DOI: 10.37200/IJPR/V24I2/PR200545
Received: 26 Dec 2019 | Revised: 10 Jan 2020 | Accepted: 21 Jan 2020

must be owned. Age above 51 components of emergency funds has started to decrease. This is because at that age they already have planned investments at the age of 20-40 and 41-51.

The ability to routinely save low conditions has the same portion of 11 people, meaning that respondents perceive saving as a less noticed factor. But for high category conditions as many as 75 people at the age of 20-40 allocate funds to save. As many as 27 people at the age of more than 51 with a high category are still trying to have savings. Overall the level of savings for respondents based on the finance life cycle, namely the age of 20-40 becomes important.

Debt levels are measured in the low category, namely at age> 51. This is in accordance with financial planning behavior that age> 51 portions of debt must be small or better not to have debt anymore. This is because the expenditure items will be more on health costs so that respondents at that age have a low or little level of debt.

Asset diversification aims to reduce the risk of a number of assets owned. In addition, the purpose of diversifying assets is used to maximize the yield value of a number of assets. A person's assets need to be protected because it provides comfort for the owner so that the assets he has been guaranteed until later when they will be inherited. Table 3 shows that there were quite a number of respondents who had diversified their assets, 86 at the age of 20-40. This can be empirically justified that at the age of 20-40 someone starts to open some savings, make stock purchases or make investments. Retirement preparation is a natural thing inherent in a person. Table 3 shows that as many as 75 people at the age of 20-40 years and ages 41-50 start preparing. Respondents were aware that the current work was temporary so that when it did not work it meant that there must be income that was still received apart from retirement. A total of 11 respondents at the age of 20-40 had prepared a retirement plan. Knowledge of taxes and distribution of wealth in the context of personal finance is a concern because the control factor of the owner is not necessarily able to be distributed safely to the heir.

Table 3: Cross Tabulation of Financial Personal and Finance Life Cycle

Variables	Category	Finance Life Cycle			Total
		20-40	41-50	>51	
Emergency Funds	LOW	33	37	2	72
	HIGH	53	47	31	131
	TOTAL	86	84	33	203
Saving Rates	LOW	11	11	6	28
	HIGH	75	73	27	175
	TOTAL	86	84	33	203
Debt Level	LOW	24	25	8	57
	HIGH	62	59	25	146
	TOTAL	86	84	33	203
Diversification Assets	LOW	14	12	8	34
	HIGH	72	72	25	169
	TOTAL	86	84	33	203
Retirement	LOW	11	9	2	22
	HIGH	75	75	31	81
	TOTAL	86	84	33	203
Tax and wealth distribution	LOW	18	20	8	46
	HIGH	68	64	25	157
	TOTAL	86	84	33	203

Source: The authors

DOI: 10.37200/IJPR/V24I2/PR200545
Received: 26 Dec 2019 | Revised: 10 Jan 2020 | Accepted: 21 Jan 2020

The results of the research hypothesis testing are shown in Table 4. A number of hypotheses submitted are only one declared acceptable, namely the relationship between the emergency fund and the financial life cycle (H1 is accepted). These findings prove that having emergency funds is an important factor in personal finance. This is because in anticipation of expenditure if cash inflows occur obstacles. The ideal emergency funds ratio is 3-6 months of expenditure per month (FPSB, 2013). The findings of this study indicate that financial behavior about the importance of emergency funds will guarantee the continuity of payments and expenditures if there are obstacles in cash flow (Xiao, Tang, & Shim, 2009). Indicators that are a reflection of emergency funds with four statements, namely having an emergency fund, the current emergency fund is sufficient, have other sources of funds that are liquid and have other sources of assets.

Table 4: Statistical Test Result: Pearson Chi-Square

Variables	Value	Sig α0.05	Decision
Emergency fund	15,487	0,000	H_1 supported
Saving rate	0,642	0,276	H_2not supported
Debt level	0,360	0,835	H_3not supported
Diversification asset	1,708	0,426	H_4not supported
Retirement	1,120	0,571	H_5notsupported
Tax and wealth distribution	0,257	0,879	H_6not supported

Source: The authors

The other dimensions found no relationship, H2-H6 was declared rejected. The research findings that are not significant indicating that the respondent's financial behavior in managing finances is not based on the finance life cycle. This means that at the age of 20-40 years which is included in the stage of collecting wealth, age 41-50 is a stage of multiplying wealth and the age above 51 is the stage of distributing wealth. Empirical evidence of research shows that financial management behavior is needed and is not limited to age. The importance of financial management determines the quality of life in the future towards financial freedom.

V. Conclusion

Management of personal finance is a key topic in personal financial management. Personal financial management is measured in six dimensions, namely emergency funds, debt levels, savings rates, asset diversification, retirement preparation, taxes and wealth distribution. Based on the discussion above it was found that only the dimensions of the emergency fund proved to have a relationship with the financial life cycle while the other dimensions were found to have no relationship. An important contribution in this study is that the relationship between the financial management behavior is not based on this life cycle. Finance. Management of personal finance must be carried out earlier from the age of 20 years. Future research can do this topic again by measuring six dimensions to the level of satisfaction of personal financial management.

References

[1] Amanah, E., Rahadian, D., & Iradianty, A. (2016). Pengaruh Financial Knowledge, Financial Attitude dan External Locus of Control terhadap Personal Financial Management Behavior pada Mahasiswa S1 Universitas Telkom. *In E-Proceeding of Management* (Vol. 3, pp. 1228–1235).

[2] Arifin, A. Z. (2018). Influence Factors toward Financial Satisfaction with Financial Behavior as Intervening Variable on Jakarta Area Workforce. *European Research Studies Journal*, XXI(1), 90–103.

DOI: 10.37200/IJPR/V24I2/PR200545
Received: 26 Dec 2019 | Revised: 10 Jan 2020 | Accepted: 21 Jan 2020

[3] Dew, J., & Xiao, J. J. (2011). The Financial Management Behavior Scales: Development and Validation. *Journal of Financial Counseling and Planning,* 22, 43–59.
[4] FPSB. (2013). Dasar-dasar Perencanaan Keuangan. *Modul.*
[5] Hadi, H. D. K., & Dewi, A. S. (2019). Peran Kemampuan Keuangan sebagai Mediator Pendidikan Keuangan dan Kepuasan Keuangan (Studi Kasus pada Usia Produktif di Kota Surabaya). *JAWARA: Jurnal Wawasan Dan Riset Akuntansi,* 6(2), 74–88.
[6] Herdjiono, I., & Damanik, L. A. (2016). Pengaruh Financial Attitude, Financial Knowledge, Parental Income terhadap Financial Management Behavior. *Jurnal Manajemen Teori Dan Terapan,* 9(3), 226–241.
[7] Hira, T. K., & Mugenda, O. M. (1998). Predictors Of Financial Satisfaction : Differences Between Retirees And Non- Predictors Of Financial Satisfaction : Differences Between Retirees And Non-retirees. *Journal of Financial Counseling and Planning,* 9(2), 75–84.
[8] OJK. (2017). Strategi Nasional Literasi Keuangan Indonesia, 1–99.
[9] Raharjo, B. (2015). Mendadak Hemat Saat Kepepet. *Jakarta: Transmedia Pustaka.*
[10] Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude, Financial Behaviour, and Financial Knowledge Towards Financial Literacy : A Structural Equation Modeling Approach. *FIIB Business Review,* 1–10.
[11] Suwito, G. (2018). Cerdas Mengelola Keuangan. *Materi Edukasi Literasi Keuangan.*
[12] Xiao, J. J., & Porto, N. (2017). Financial Education and Financial Satisfaction : Financial Literacy, Behavior, and Capability as Mediators Introduction. *International Journal of Bank Marketing,* 35(5), 1–30.
[13] Xiao, J. J., Tang, C., & Shim, S. (2009). Acting for Happiness : Financial Behavior and Life Satisfaction of College Students. *Social Indicators Research,* 92(1), 53–68.