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# SAVING BEHAVIOR AS THE IMPACT OF FINANCIAL LITERATURE WITH DETERMINATION OF EDUCATION LEVEL AND INCOME LEVEL

***Feliciana Guterres Barros**

Graduate Student Master of Management, Universidade da Paz, Dili Timor-Leste

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****Corresponding author:***
***Feliciana Guterres Barros***

## ABSTRACT

Economic development in a country requires contributions from various industrial sectors, both the service industry and the manufacturing industry. Economic growth is assessed from people's lives through community welfare so that people's welfare is considered prosperous, the community must have a good level of education and income so that it can improve financial management behavior which will increase investment behavior both in the real sector and in the financial sector. This study aims to examine and explain saving behavior as the impact of financial literacy with the determination of education level and income level. This study used Bank Mandiri as a sample of 120 people, which were taken by distributing questionnaires. The method of sampling is random. The analysis technique used in this research is in the form of *path analysis*. The results showed that the level of education had no significant and significant effect on saving behavior with financial literacy as the intervening variable, while the income level variable had a weak but not significant effect on saving behavior with financial literacy as the intervening variable.



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# INTRODUCTION

Economic limitations provide all the benefits to all countries. Studies show that economically open countries enjoy higher economic growth than relatively closed countries. Dollar and Kray (2001) in (Dkk, 2003). Ideally, economic cooperation is global without obstacles, but in reality, *fair trade* is difficult to achieve because global protection in the form of tariffs and non-tariff, as well as substitutions are still there so that *free trade* becomes difficult to realize. Empirical data shows that economic dependence has a stronger pattern at the regional level so the degree of economic openness appears to be stronger at the regional level than at the global level. The growth of financial services in Southeast Asia, especially in the banking sector, is currently increasing in line with the rapid international trade traffic. Currently, the growth of banking in Southeast Asia is dominated by the banks of Singapore, Malaysia, Thailand, the Philippines, and Indonesia. (Fauzia, 2018). PT. Bank Mandiri is a private bank from Indonesia. Overseas Branch was established on August 11, 2003, where it received a license from the Banking and Payments Authority (BPA), or which has changed its name to Banco Central de Timor Leste (BCTL), on August 8, 2003, in the form of Banking License Level. As a foreign private bank, Bank Mandiri also carries out operational activities like other financial institutions, namely collecting funds and distributing funds to the wider community. In raising funds, Bank Mandiri offers bank products such as current accounts, savings deposits, and time deposits. To date, Bank Mandiri's deposit customers have reached 51,000 people, from 4,471 checking accounts, 39,049 savings accounts, and 236-time deposit accounts. In an economic context, saving is the residual income after deducting consumption over a certain period. Development theory, (M, 1936) states that saving is part of the income of a certain period that is not consumed in the period concerned. Saving is one way to control one's finances in life. People can set aside some of their wealth to meet their future needs. Financial management in this modern competition requires financial intelligence which is needed by the community. It is deemed necessary because financial intelligence which includes how a person manages his finances well is capital to improve the welfare of each individual. Often a person's failure to manage finances is not caused by a person's low income in managing finances, not because of a person's low income, but rather on factors of ignorance and the individual's inability to allocate income to certain posts. Good financial intelligence is indicated by a high understanding of *financial literacy*. Various works of literature state that the understanding of financial literacy varies. Financial literacy is a person's skills and knowledge to make effective decisions about their investments to increase their sources of income. Financial literacy will affect how people save, borrow, invest and manage finances. (Hailwood, 2007). This includes the ability to discern financial choices, discuss money and financial matters without (or even though) it is uncomfortable, plan for the future, and respond appropriately to any life event that affects day-to-day financial decisions, including events in general economic activity. Financial literacy is financial knowledge and the ability to multiply it (*knowledge and ability* ), which includes knowledge of credit and debt, understanding of savings and investment, and knowledge of risk (Lusardi Annamaria, 2010). People who save directly have taken care of their financial condition from financial knowledge. Financial intelligence is capital to improve one's financial well-being. A person's failure to manage finances is not caused by a lack of income but is caused by a person's inability to read his financial condition. For this reason, the role of the government is urgently needed to increase financial knowledge among the community, so that the effectiveness of managing financial literacy in the future will be even better.

(Holgarth Jeanne, 2003)obtained evidence that households with lower financial knowledge scores also had lower saving behavior in the future. Households with 90 percent of saving knowledge have a 31 percent chance of being in the high-savings group, while households with 70 percent of saving knowledge have only a 27 percent chance of being in the high-savings category. The relationship between the score of saving knowledge and saving behavior is significantly positive. (Fernandez, 2010)provides evidence that the level of financial literacy has a positive effect on the possibility of saving for old age. The current phenomenon of financial literacy in terms of the ability to manage finances individually is less effective due to the allocation of funds from income, only used for consumption needs, so this has resulted in even though the desire to save is good but cannot be carried out efficiently, which is seen from in terms of managing personal or family finances. Education also has an important role in influencing saving behavior, however, the impact of education on saving behavior is long term because of the need for a process to reflect knowledge to (al, 2003) The influence of education on saving behavior can be directly or indirectly through financial literacy. The higher a person's education, the more likely that person has more financial knowledge. This increase in financial knowledge can further encourage better-saving behavior. Thus, the effect of education on saving behavior is mediated by financial literacy.

Financial education is commonplace in people's lives through formal education and non-formal education. The value of education can be seen from the implementation of society through theories or materials obtained from formal education and non-formal education. A phenomenon that often occurs in society is that it is difficult to implement it. Although the level of education is adequate, it is always sloping with problems that are difficult to balance between theory and practice. Education is an activity that is carried out with effort and is planned in the mastery of science to change the desired behavior and the formation of a better mindset. (Lusardi, 2010). Revenue in theoretical economics is the result received, either in the form of money or otherwise for the use of wealth (human services) through the proceeds from the sale of production factors that are owned from the results of production. Income in people's lives consists of [1] permanent income which is always received at any given period and can be estimated beforehand from salary or wage income. [2] Temporary income is income that cannot be estimated. Income is the income level of life that can be enjoyed by individuals in the community and also the income of the community which will later be used to repay loans for those who make loans. (Lopez, 2010)provides evidence that households with higher incomes are more likely to save for old age.

**Research purposes**

In general, the research objective is to prove the phenomenon of Saving Behavior as the impact of Financial Literacy with the determination of Education Level and Income Level. Based on the formulation of the problem that has been described previously, this study aims to:

- To analyze and examine the effect of Education Level on Financial Literacy. At Bank Mandiri (Persero) Tbk. KLN Dili Timor Leste.
- To analyze and examine the effect of Income Level on Financial Literacy. At Bank Mandiri (Persero) Tbk. KLN Dili Timor Leste.
- To analyze and examine the effect of Education Level on Saving Behavior. At Bank Mandiri (Persero) Tbk. KLN Dili Timor Leste.
- To analyze and examine the effect of Income Level on Saving Behavior. At Bank Mandiri (Persero) Tbk. KLN Dili Timor Leste.
- To analyze and examine the effect of Education Level on Saving Behavior with Financial Literacy mediation. At Bank Mandiri (Persero) Tbk. KLN Dili Timor Leste.
- To analyze and assess the level of income that affects the behavior of saving with financial literacy mediation. At Bank Mandiri (Persero) Tbk. KLN Dili Timor Leste.

**Literature Review**

**Savings:** In an economic context, saving is defined as the residual income after deducting consumption over a certain period (browning, 1996); (warneryd, 1999). On the other hand, saving in a psychological context is called the process of not spending money for the current period to use it in the future (warneryd, 1999). In other words, saving behavior is a combination of the perception of future needs, saving decisions, and savings actions. For the most part, people tend to define savings as investing, placing money in a bank account, speculating, and paying off the mortgage (warneryd, 1999). According to Banking Law No. 10 Years (1998) in (kasmir, 2001), savings are savings that can only be withdrawn according to certain agreed conditions but cannot be withdrawn by cheque, billet giro, and or other equivalent instruments. Meanwhile, according to Bank Indonesia (2010), saving is setting aside money to be accumulated to achieve certain target funds so that they can be used for certain purposes in the future.

**Income:** According to (Suroto, 2000)income is all receipts in the form of money or in the form of goods originating from other parties as well as industrial products which are valued based on a sum of money from assets prevailing at that time. Income is a person's source of income to meet daily needs and is very important for the survival and livelihood of a person directly or indirectly. Meanwhile (simanjuntak, 1998), it is argued that an increase in income will increase *utility* either through increased consumption or through an increase in leisure time. Increasing free time means reducing working hours. Income can be obtained from various kinds of businesses carried out by the community. According to Mankiw (Sukirno, 2003) defining income is all a person's receipts as a reward for his services in the production process. Income is the amount of income by residents for their work performance during a certain period, either daily, weekly, monthly, or yearly. A person's income is basically from work in the service or production sector, as well as the hours worked that are devoted to the hourly rate received.

**Education:** According to Rousseau (1712-1778 AD), (Anwar, 2017)education is providing ourselves with something that did not exist in us as children, but we need it in adulthood, while Supriyatno (2001), in (Meinarni Asnawi, 2019)saying that education is an interpretation by meaning to maintain individuals with ever-increasing needs and is a hope to be able to develop themselves to be successful and to expand, intensify knowledge and understand the elements around them. Education also includes all changes that occur as a result of individual participation in experiences and learning.

**Financial Literacy:** According to (Volpe, 2002) financial literacy (*financial literacy*) is about knowledge or ability to manage personal finances and financial understanding of savings, insurance, and investment. Whereas. (Lusardi Annamaria, 2010). Financial literacy is the knowledge that a person has about financial instruments, including one's knowledge of savings or *saving*, insurance or *insurance*, investments, and other financial instruments. Financial literacy can be interpreted as financial knowledge, to achieve prosperity. Furthermore, (Hailwood, 2007) financial literacy will affect how people save, borrow, invest and manage finances.

# RESEARCH METHODS

**Types of research:** Based on its objectives, this research is classified as associative research because it aims to examine how much impact one variable has on other variables. Based on the approach used in this study using a qualitative approach. A quantitative approach is a research approach that emphasizes data and numbers (Numerical) which are processed by statistical methods so that the significance of the variables studied will be obtained (sugiono, 2015).

**Population:** The population is a generalization area consisting of objects/subjects that have certain quantities and characteristics that are applied by researchers to be studied and then conclusions are drawn. The population is also not just the number of objects/subjects studied but includes all the characteristics/properties possessed by the subject or object under study (sugiono, 2015). The population in this study is Bank Mandiri customers.

**Sample:** The sample is part of the number of characteristics, for example, due to limited funds, energy, and time, the researcher can use samples taken from the population. What is learned from the sample, the conclusions can be applied to the population. For this reason, samples taken from the population must be truly representative or representative (sugiono, 2015). The sample used in this study is part of the community that is funding customers in Dili. Due to time constraints in this study, the researchers only took 120 respondents as samples.

## ANALYSIS RESULTS AND DISCUSSION

**Validity test:** Validity is used to measure the validity or validity of a questionnaire. A questionnaire is said to be valid if the statement on the questionnaire reveals something that will be measured by the questionnaire. The measurement is said to be valid if it measures the objective in a real or correct way, because the instrument used in this study is in the form of a questionnaire for the variable of saving behavior (Y), while the education level variable (X1), income level variable (X2), and Financial Literacy (Z) are category variable (Dummy) then the test is not carried out, while the data validity test is carried out with the content validity test. Content validity testing is carried out by calculating the correlation between the statement item scores and the total construct or variable score. The significance test was carried out by comparing the calculated r-value with the r table for *a degree of freedom* (df) = n – 2, in this case, n is the number of samples. If r count is greater than the r table and the value is positive, then the item or statement, or indicator is declared valid (Imam, 2016)

Decision-making:

- If r-count > r -able, it can be stated that the statement item is Valid
- If r-count < r-table, it can be declared an invalid statement item

**Definer table:** By looking at the distribution table r table based on DF of N-2 = 120-2 = 118 with a significance of 0.05, the r table value is 0.179.

**Validity Test Results Saving Behavior Variable**

| items | R-Count | R=table | Information |
|---|---|---|---|
| Y.1 | 0.504 | 0.179 | Valid |
| Y.2 | 0.457 | 0.179 | Valid |
| Y.3 | 0.686 | 0.179 | Valid |
| Y.4 | 0.784 | 0.179 | Valid |
| Y.5 | 0.527 | 0.179 | Valid |
| Y.6 | 0.737 | 0.179 | Valid |
| Y.7 | 0.560 | 0.179 | Valid |
| Y.8 | 0.638 | 0.179 | Valid |
| Y.9 | 0.506 | 0.179 | Valid |
| Y.10 | 0.504 | 0.179 | Valid |

Based on the results of data processing in the table above, the calculated r-value of Y.1 to Y.10 has a value greater than r table 0.179, so it can be concluded that all statements on the Saving Behavior variable are declared valid.

**Reliability Test:** A reliability test is a tool to measure a questionnaire which is an indicator of a variable or constructs.

**Saving Behavior Variable Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| 0.863 _ | 10 |

A questionnaire is said to be reliable or reliable if a person's answer to the statement is consistent or stable from time to time. Measurement of reliability can be measured by statistical test Cronbach Alpha (α). A constructor variable is said to be reliable if it gives a Cronbach alpha value > 0.60 (Imam, 2016). Here are the results Reliability Test processed using SPSS. Based on the results of data processing above, the Cronbach Alpha value is 0.863 is greater than the limit of 0.70, it can be concluded that the Saving Behavior variable is declared reliable.

**Path Analysis (Path Analysis) – Intervening Variable Regression Analysis:** Path analysis uses regression analysis to determine the value of the path of direct and indirect influence. There are 2 multiple regression models in this study, Multiple Regression Analysis Model 1, namely the effect of the variable Education Level (X1) and Income Level (X2) on Financial Literacy (Z). While the Multiple Regression Analysis Model 2 is the influence of the variables Education Level (X1), Income Level (X2), and Financial Literacy (Z) on Saving Behavior (Y). The following are the results of multiple regression analysis models 1 and 2 which are processed using the SPSS program:

**Multiple Regression Analysis Model 1**

| Coefficients [a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 18,263 | .752 | | 24,288 | .000 |
| | Education Level | -.072 | .141 | -.049 | -.512 | .610 |
| | Income Level | .001 | .119 | .001 | .009 | .993 |
| a. Dependent Variable: Literacy Finance | | | | | | |

Dependent Variable: Literacy Finance

**Multiple Regression Analysis Model 2**

| Coefficients [a] | | | | | | |
|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | 14.051 | 8.938 | | 1.572 | .119 |
| | Education Level | -1,995 | .681 | -.262 | -2,929 | .004 |
| | tLevel Income | .558 | .574 | .087 | .973 | .333 |
| | Financial Literacy | 1.031 | .447 | .200 | 2,306 | .023 |

Dependent Variable: Behavior Save

Based on the results in the table above, it can be determined the direct influence and indirect influence. Previously, the t table value was determined as a limit to determine whether there was an effect or not. The t table value is obtained from the t table distribution with DF = N (Number of Respondents – k (Number of Independent Variables) = 120 – 3 = 117, with a significance of 0.05, the t table value is 1.657. The basis for decision making is 2 steps, namely by looking at the value of t count and the value of Sig.

**Deciding with compare t count and t table:**

- T-count < t-table or t-count > t-table ;

So it can be concluded that the independent variable does not affect the dependent variable.

- T-count > t-table or t-count < t-table ;

So it can be concluded that the independent variable has a significant effect on the dependent variable

Deciding with compare significance

- Significance value > 0.05; So there is no significant effect between the independent and dependent variables
- Significance value < 0.05; Then there is a significant influence between the independent and dependent variables

**The hypotheses sought in this study and the magnitude of the path analysis are as follows:**

H1 = Effect of Education Level on Financial Literacy
H2 = Effect of Income Level on Financial Literacy
H3 = Direct Effect of Education Level on Saving Behavior
H4 = Direct Effect of Income Level on Saving Behavior
H5 = Direct Effect of Financial Literacy on Saving Behavior
H6 = Indirect Effect of Education Level on Saving Behavior with

Financial Literacy as an Intervening Variable

H7 = Indirect Effect of Income Level on Saving Behavior with Financial Literacy as an Intervening Variable

**Hypothesis test**

**Direct Effect of Education Level on Financial Literacy:** Based on the multiple regression analysis table model 1, the t-count value of education level on financial literacy is 0.512 which is smaller than the t-table of 1.657 and a significant value of 0.601 is greater than 0.05, it can be concluded that the education level variable has no effect positive and not significant to financial literacy.

**The Direct Effect of Income Level on Financial Literacy:** Based on the multiple regression analysis table model 1, it can be concluded that the t-count value of income level on financial literacy is 0.009 which is smaller than the t-table value of 1.657 and a significant value of 0.993 is greater than 0.05, it can be concluded that the income level variable has no direct effect and indirectly to financial literacy.

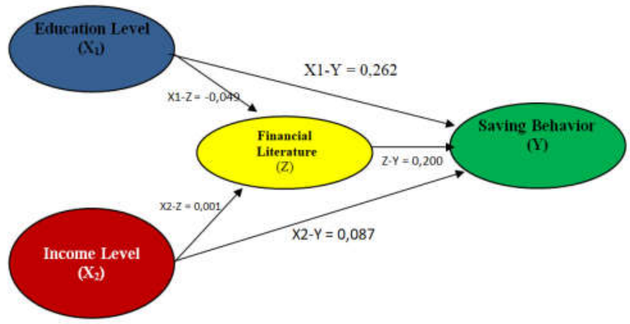
**The direct effect of education level on saving behavior:** Based on the table of multiple regression analysis models 2, it is found that the t-count value of education level on saving behavior is -2.929 which is greater than the t-table of 1.657 and a significant value of 0.004 is less than 0.05, it can be concluded that the education level variable has a negative effect and significant effect on saving behavior.

**Direct Effect of Income Level on Saving Behavior:** Based on table analysis regression multiple models 2 in getting a value of t count the level of income on saving behavior is 9.973 which is smaller than the t-table value of 1.657 and a significant value of 0.333 is greater than 0.05, so it can be concluded that the income level variable has no and no significant effect on saving behavior.

**Direct Effects of Financial Literacy on Saving Behavior:** Based on the multiple regression analysis table model 2, it can be seen that the t value of financial literacy on saving behavior is 2,306 which is greater than the t table of 1,657 and a significant value of 0.023 is smaller than 0.05, it can be concluded that the financial literacy variable has a positive and significant effect. on saving behavior.

**Indirect Effect of Education Level on Saving Behavior with Financial Literacy as an Intervening Variable:** (*Path analysis*) which is an extension of multiple linear regression analysis. Both equation models using multiple regression analysis were conducted to determine the strength of the relationship of the independent variable (independent) to the mediating variable (intervening) and also the strength of the relationship of the independent variable (independent) to the dependent variable (dependent). The results of this path analysis are based on the results of the output of the two regressions to obtain the beta coefficient and find a direct relationship, in full it is shown in the following figure:

Path Analysis Results




Based on the picture above, the magnitude of the direct and indirect influence between the education level variable on saving behavior through the financial literacy intervening variable is as follows:

- The magnitude of the direct effect of X1-Y is 0.262
- The magnitude of the indirect effect of X1-Y is the value of the influence of X1-Z multiplied by the value of the influence of ZY

= -0.049 x 0.200
= -0.0098

Based on these numbers, it can be concluded that, because the value of the direct influence of the education level variable on saving behavior (X1-Y) - 0.262 is greater than the direct and indirect effect between the financial literacy intervening variable of -0.0098, the relationship that occurs indirect relationship.

**Indirect Effect of Income Level on Saving Behavior with Financial Literacy as an Intervening Variable:** Based on the picture above, the magnitude of the direct and indirect influence between income level variables on saving behavior through financial literacy intervening variables is as follows:

- The magnitude of the direct effect of X2-Y is 0.087
- The magnitude of the indirect effect of X2-Y is the value of the influence of X2-Z multiplied by the value of the influence of ZY

= 0.001 x 0.200
= 0.0002

Based on these figures, it can be concluded that, because the value of the direct influence of the income level variable on saving behavior (X2-Y) is 0.087, it is greater than the direct and indirect effect of the income level variable on saving behavior through the financial literacy intervening variable of 0.0002, then the relationship that occurs is a direct relationship.

**Determination Test:** Analysis of $R^2$ (*R square*) or the coefficient of determination is used to determine how big the percentage contribution of the influence of the independent variables together on the dependent variable. Based on the table above, it can be seen that the R square value is 0.002. So the contribution of the influence of the independent variable education level and income level on the financial literacy variable in this study was 2% while the remaining 98% was influenced by other factors that were not examined in this study. Based on the table above, it can be seen that the R square value is 0.133. So the contribution of the influence of the independent variables education level, income level, and financial literacy on the saving behavior variable in this study amounted to 13.3%, while the remaining 86.7% was influenced by other factors not examined in this study.

**Results of Multiple Regression Determination Test Model 1**

| Model Summary b | | | | |
|---|---|---|---|---|
| model _ | R | R Square | Adjusted R Square | Std. The error of the Estimate |
| 1 | .049 a | .002 | -.015 | 1.397 |

**Multiple Regression Determinant Test Model 2**

| Model Summary b | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. The error of the Estimate |
| 1 | .364 a | .133 | .110 | .364 a |

**Discussion of Research Results:** From the results of the SPSS test above, it can be explained the influence between the independent variables individually on the intervening variable and the intervening variable on the dependent variable as follows:

**The Effect of Education Level on Financial Literacy:** Testing hypothesis 1, shows that there is no effect and no significant level of education variable on the financial literacy variable. This means that the higher the level of education, the lower the financial literacy. The results of the study are not significant, indicating that every customer who has the last education level of SMP, SMA, Diploma, and Postgraduate has the same opportunity to have financial literacy. This is because learning media to gain knowledge about financial literacy can be obtained anywhere, not only in formal education banks. In addition, in Timor Leste itself, financial literacy education is still rare, both in elementary schools and universities.

The curriculum on financial literacy education has not been included in learning so access to learning to gain knowledge of financial management is limited. In contrast to several countries that have long included financial literacy education curricula in the classroom, such as Canada, Brazil, and Australia. Learning knowledge about financial literacy in Timor Leste is a shared responsibility by several parties including financial institutions, educational institutions, churches, and the government. So that people who do not have a higher education level can get the same opportunity to have better financial literacy. The results of this study are consistent with the results of research (Fernandez, 2010)and research where the educational background of parents does not have a significant effect on financial literacy. However, the results of this study are not consistent with the results of the study (wildayati, 2018), which proves that education influences financial literacy.

**The Effect of Income Level on Financial Literacy:** Testing hypothesis 2, shows that there is no and no significant effect on the income level variable on the financial literacy variable. This means that the higher the level of income, the lower the financial literacy. The results of the study were negative and insignificant, indicating that every saving behavior of independent bank customers with higher incomes has a better financial literacy opportunity. This study is under previous studies which stated that financial literacy increases along with an increase in income (Fernandez, 2010) which also affects financial literacy. Family income has a relatively strong and positive relationship to financial control. The results of this study are appropriate to describe the reality of the saving behavior of independent bank customers who become respondents, where the majority of customer actors have a high financial literacy category or *high literate* where they have sufficient skills to have skills in managing their finances so that with a large amount of income they will tend to have no difficulty in managing finances properly. No matter how high a person's income is, without proper management, financial security will be difficult to achieve. It is also undeniable that usually, the problem of saving behavior in Timor Leste is one of them is the lack of knowledge and competence about banks, resulting in low customer interest in saving. This is also seen in the inability of bank customers in terms of financial management, especially in terms of financial records and financial management. In addition, the consumptive character of the majority of the people of Timor Leste is also a strong reason to strengthen the results of this study, people who have large amounts of income tend to be wasteful and squander their wealth. If the available funds are sufficient to satisfy one desire, another will arise, and when the latter has been satisfied another will arise, and thus life will be filled with struggles to fulfill that endless chain of desires. This extravagant person can be indicated as having low financial literacy because he does not control his income better and does not prioritize saving or investing. The results of this study are not consistent with the results of the study (Fernandez, 2010) (wildayati, 2018), which proves that income influences financial literacy.

**The Effect of Education Level on Saving Behavior:** Testing hypothesis 3, shows the negative and significant influence of the Education Level variable on the saving behavior variable. This means that the higher the level of education, the more negative and significant effect on saving behavior. Negative but significant research results indicate that every customer, every customer who has the latest education level of SMP, SMA, Diploma, Bachelor, and Postgraduate has different saving behavior. This is because education will affect a person's way of thinking in responding to a problem, including in making decisions, customers with higher education have different views regarding the assessment of a product compared to customers with less education. A person who is highly educated does not necessarily have better-saving behavior than an uneducated person. This is corroborated by the theory of (Thung, 2012), saving behavior is a combination of the perception of future needs, savings decisions, and savings actions. Based on this theoretical statement, customer perceptions in terms of determining future needs, savings, and savings decisions are different. The results of this study are consistent with the results of research (Fernandez, 2010) where the educational background of parents does not have a significant effect on saving behavior. However, the results of this study are consistent with the results of the study (wildayati, 2018), which proves that education influences financial literacy.

**The Effect of Income Level on Saving Behavior:** Testing hypothesis 4, shows that there is no effect and no significant variable of income level on the variable of saving behavior. This means that the higher the level of income, the lower the saving behavior. Negative and insignificant research results indicate that every saving behavior of Bank Mandiri customers is determined by the amount of income or in theory, the higher a person's income, the higher the possibility of saving. However, the results of this study were just the opposite. The higher a person's income, the decision to become a customer decreases. Judging from the results of respondents' answers in the motivation variable on security indicators. Respondents with high incomes tend to give negative values to bank services and have an impact on saving behavior, namely low saving decisions. Thus, the higher a person's income, the less he or she intends to use bank services because they feel less comfortable with the service. The results of this study are not consistent with the results of the (Fernandez, 2010) study, (Wildayati, 2018) which proves that income influences Saving Behavior.

**The Effect of Financial Literacy on Saving Behavior:** Testing hypothesis 5, shows a positive and significant effect of the Financial Literacy variable on the Saving Behavior variable, meaning that the higher the Financial Literacy, the higher the Saving Behavior. This means that there is a positive influence of financial literacy on saving behavior. Thus, the higher the customer's knowledge of finance, the wiser the customer will be in managing his finances. Individuals who can make the right decisions about finances will not have financial problems in the future and demonstrate sound financial behavior and can prioritize needs rather than wants. Healthy saving behavior is shown by good planning, management, and financial control activities. Indicators of good saving behavior can be seen from the way/attitude of a person in managing the entry and exit of money, credit management, savings, and investment (Holgarth Jeanne, 2003) Wisely or not personal financial management is closely related to one's ability and knowledge of financial concepts known as financial literacy. Financial literacy is defined as a person's intelligence or ability to manage his finances. Financial literacy is a must for every individual to avoid financial problems because individuals are often faced with a *trade-off*, namely a situation where someone has to sacrifice having to sacrifice one interest for the sake of another. The *trade-off problem* occurs because a person is limited by his financial ability (income) to obtain all the desired goods. Financial literacy affects almost all aspects related to saving behavior related to planning and spending money such as income, credit card use, savings, investment, financial management, and financial decision making. The results of this study are consistent with the results of the research (Fernandez, 2010), which states that financial literacy has a positive and significant effect on saving behavior. The results of this study are also consistent with the research (sari, 2015) (pulungan, 2016). (teguh, 2017), (wildayati, 2018) and (milani, 2018), but the results of this study are contrary to research in (Ayu, 2015) which the financial literacy variable does not have a significant influence on saving behavior.

**The direct and indirect effect of Education Level on Saving Behavior with Financial Literacy as an Intervening:** *Path* analysis test shows that there is a direct relationship between Education Level (X1) and Savings Behavior (Y) because the value of $_{4}$ = -0.262 is greater than (β $_{1*7}$ ) = -0.0098, where -0.0098 is the result of an indirect relationship between Education Level (X1) on Saving Behavior (Y) and financial literacy (Z) as an intervening variable. Thus, the results of the study prove that Financial Literacy is not an intervening variable, but it can also be interpreted that the intervening variable in this study can strengthen the relationship between education level and saving behavior. This means that it can be concluded that the sixth hypothesis is also not proven to have an indirect effect because one of the paths is not significant. It can be concluded that the higher a person's level of education is not necessarily the higher his ability to manage his finances.

**Direct and Indirect Effects of Income Level on Saving Behavior with Financial Literacy as an Intervening:** *Path* analysis test shows that there is a direct relationship between Income Level (X2) and Savings Behavior (Y) because the value of $_{5}$ = 0.087 is bigger of (β $_{2*7)}$ = 0.0002, where 0.0002 is the result of an indirect relationship between Income Level (X2) on Savings Behavior (Y) and Financial Literacy (Z) as Intervening Variables. Thus, the results of the study prove that Financial Literacy is not an intervening variable, but it can also be interpreted that the intervening variable in this study can strengthen the relationship between income levels and saving behavior. This means that it can be concluded that the seventh hypothesis is also not proven to have an indirect effect because one of the paths is not significant. It can be concluded that the higher the income is not necessarily the higher the ability to manage personal finances.

## CLOSING

**Conclusions, Suggestions, and Recommendations:** To conclude, this article concludes that, three main things are presented as the meaning of research in an integrated manner, to all the research results that have been obtained. The three main points consist of: first, the conclusion of the research, the second is the suggestion and the third is the recommendation.

### Conclusion

**From the results of research and discussions that have been stated in this study, it can be concluded as follows:**

- Education Level negative effect and no significant to Literacy finance, It means the more High Education Level, however knowledge Literacy Finance low.
- T level Income negative effect and no significant to Literacy Finance (Z). It means Increasing Income Level increases, however, knowledge literacy Finance decreased.
- Education Level takes effect negative and significant to Behavior Saving, Meaning Increasing Education Level low, then Behavior Save low.
- Income Level no takes effect and no significant to Behavior Saving, Meaning Increasing Income Level increases, then Behavior Save decreased.
- Literacy Finance positive effect and significant to Behavior Saving, Meaning the more Literacy Finance is high, then Behavior Save high.
- Test analysis the first path (path analysis), showing variable intervention in a study this could strengthen connection Between Education Levels and Behavior Saving.
- Test analysis second path (path analysis), showing variable intervention in a study this could strengthen the connection between levels Income and Behavior Saving.

### Suggestion

**From the conclusions, the following suggestions can be made:**

- Financial institutions need to give education about Literacy Finance in the form of knowledge about management finance, culture saves and invests so that people with pattern life consumptive reduced.
- It is hoped that with continuous education by the government, a high level of education and income levels, and good financial literacy, saving behavior will also be high.

### Recommendation

For Researchers next better also use a method *interview* other than with a questionnaire for getting more data credible, as well as expected capable expand population and sample, so that results study could generalized more wide again. Besides that, the researcher next expected capable develop a study this with method involve other possible variables that influence Behavior Saving at the institution Bank finances so that the results obtained could generalized n.

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