

## FINANCIAL LITERACY INFLUENCING FACTOR ANALYSIS TO STUDENTS IN BATAM CITY

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**Abstract:** Over time and the instability of economic conditions, financial literacy is an important factor influencing the recovery of these conditions. Therefore, this study aims to determine the factors that affect financial literacy. This study uses a multiple linear regression model with a sample size of 402 which was tested through the SPSS application. The results showed that money attitude, financial knowledge, and financial behavior had a significant effect on financial literacy. Meanwhile, the other three variables, namely financial education, financial socialization agents, and financial attitude do not have a significant effect on financial literacy.

**Key words:** *Financial Education, Financial Socialization Agents, Money Attitude, Financial Knowledge, Financial Behavior, Financial Attitude, and Financial Literacy.*

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### 1. INTRODUCTION

Financial literacy is a factor that is closely related to the economy, both individually and collectively. A country that has succeeded in maintaining economic stability in general has a good understanding and application of financial literacy. According to Otoritas Jasa Keuangan (2013), Financial literacy provides an understanding of the benefits and risks of financial products and services, in addition to providing great benefits for the financial services sector. Financial institutions and society need each other. This causes the higher the level of public financial literacy, the more people will use financial products and services. According to Nasional Literasi dan Inklusi Keuangan (SNLIK) survey which is conducted by Otoritas Jasa Keuangan (OJK) in 2019, the financial literacy index reached 38.03% and the financial inclusion index 76.19%. This shows an increase compared to the results of the 2016 survey, where the financial literacy index was 29.7% and the financial inclusion index was 67.8%. Thus in the last 3 years there has been an increase in financial literacy in the community by 8.33%, as well as an increase in financial inclusion by 8.39%. this survey covers 12,773 respondents in 34 provinces and 67 cities / districts (Otoritas Jasa Keuangan, 2019).

Millennial circles are apparently still not very financially literate. Even though millennials need knowledge about financial literacy to prepare for a better future. The number of millennials currently there is 24% of the total population of Indonesia, equivalent to 64 million. However, there are still many millennials who are financially vulnerable. This is indicated by the lack of preparation and financial management capabilities. Among these, only 10.7% of income is saved by millennials. Then only 35.1% of millennials own their own homes. Meanwhile, 51.1% of millennial income is used up for monthly needs (Siringoringo, 2020).

In addition, when compared to other ASEAN countries, for example Singapore which has an inclusion value of 98%, Malaysia 85%, Thailand 82%, we are still below that (Saleh & Raharjo, 2020). Therefore, the Financial Services Authority collaborates with the Education Office to include financial literacy education in the curriculum of Elementary Schools (SD), Junior High Schools (SMP). Furthermore, Senior High Schools (SMA) and Vocational High Schools (SMK) will also include a financial literacy education curriculum. In addition, digital-based services are also recommended to continue to be developed, this is because Indonesia is an archipelago, so internet-based digital financial services are needed.

Financial literacy has the aim of providing an understanding to the public about the use of financial products and services according to their needs, so that they have good planning for the long term. By gaining an understanding of financial literacy, people can also avoid investing in financial instruments that are unclear and detrimental.

Based on the explanation above, the author is encouraged to do further research by examining the relationship between individuals and their daily financial activities on financial literacy, so this research is entitled "Financial Literacy Influencing Factor Analysis to Students in Batam City". This study aims to determine the effect of financial education, financial socialization agents, money attitude, financial knowledge, financial behavior, financial attitude towards financial literacy among students in the city of Batam.

## **2. LITERATURE REVIEW**

Various studies on financial literacy have been conducted by previous researchers. The following is a description of several studies on financial literacy. The study was conducted by Garg & Singh, (2017) using financial knowledge, financial attitude, and financial behavior as independent variables on financial literacy. The sample in this study was among youth in the world aged 15-24 years. Research was also conducted by Kadoya & Khan, (2017) using financial knowledge, financial behavior, and financial attitude towards financial literacy in Japanese respondents. In addition to the above research, Isomidinova, Singh, and Singh, (2017) conducted a study with a sample of 110 respondents who stated that the financial awareness of individuals in Uzbekistan was low because in the past by the Soviet Union regime it was not advisable to carry out personal financial planning, because of the enormous financial opportunities. limited. The variables used are financial education, financial socialization agents, and money attitude towards financial literacy. In the same year, research was also conducted by Abdullah, Mohammed, Salleh, & Rashid, (2017) using the variable family influence, personality characteristics, financial attitude. financial behavior, and financial knowledge of financial literacy. The sample used was 340 respondents. The results of this study stated that new students never discussed finances with their parents in their childhood, so they only have little financial knowledge.

In the previous year, research was conducted by Potrich, Vieira, & Mendes-Da-Silva, (2016) using 534 student respondents in South Brazil, private and public universities. The variables of this study consist of financial knowledge, financial behavior, and financial attitude towards financial literacy. In the same year, research was also conducted by Akram, Abbas, and Draz, (2016) using general financial awareness, financial attitude, financial behavior and financial knowledge of financial literacy in a sample of 137 students living in Pakistan.

The same research was conducted by Potrich, Vieira, Coronel, and Bender Filho (2015) which stated that financial literacy has two dimensions: an understanding that represents personal financial knowledge from financial education, and the meaningful use of the

application of personal financial knowledge management. Then, Chmelikova, (2015) also conducted research on financial literacy using financial knowledge variables, financial behavior and financial attitude towards financial literacy.

Financial education is education about finance, research conducted by Albeerdy & Gharleghi, (2015); Isomidinova & Singh, (2017); Thapa & Nepal, (2015); Ahmad et al., (2016); Bayrakdaroglu & SAN, (2015) concluded that financial education has a significant positive effect on financial literacy. This means that the higher education about finance, the better students will be in managing their finances. Other results occur in research by Aggarwal & Gupta (2014) which states that financial education does not have a significant effect on financial literacy.

Financial socialization agents are the influence of social agents such as the influence of local people such as the community, school friends, and family on financial literacy. Research results by Sohn et al., (2012); Isomidinova & Singh, (2017) concluded that financial socialization agents have a significant positive effect on financial literacy. Another result is shown by Albeerdy & Gharleghi, (2015) who concluded that financial socialization agents have no significant effect on financial literacy.

Money attitude is the nature of managing finances in managing finances. Research conducted by Albeerdy & Gharleghi, (2015); Sohn et al., (2012) concluded that money attitude has a significant positive effect on financial literacy, which means having a lot of experience in the behavior of money, the better it is in managing finances. Another result is shown by Isomidinova & Singh, (2017) who concluded that money behavior has no significant effect on financial literacy.

Financial knowledge is knowledge about finance, where the more a person's financial knowledge is, the better at managing or managing finances, this is evidenced by research conducted by Abdullah et al., (2017); Agarwalla et al., (2012, 2015); Akram et al., (2016); Chmeliková, (2015); Garg & Singh, (2017); Jorgensen & Savla, (2010); Kadoya & Khan, (2017); Ahmad et al., (2016); Potrich et al., (2015, 2016).

Financial behavior is financial behavior, where the results of research conducted by Agarwalla et al., (2012, 2015); Garg & Singh, (2017); Jorgensen & Savla, (2010); Kadoya & Khan, (2017); Potrich et al., (2015, 2016); Chmelikova, (2015) stated that financial behavior has a significant positive effect on financial literacy. This means, if the financial behavior of an individual is getting better, the better the individual is in managing finances. Different research with Abdullah et al., (2017); Akram et al., (2016); Thapa & Nepal, (2015) who concluded that there is no significant effect on financial literacy.

Based on research examined Abdullah et al., (2017); Agarwalla et al., (2015); Akram et al., (2016); Garg & Singh, (2017); Ibrahim et al., (2009); Jorgensen & Savla, (2010); Kadoya & Khan, (2017); Potrich et al., (2016, 2015) Ahmad et al., (2016) Chmelikova, (2015) concluded that financial attitude has a significant positive effect on financial literacy, which means that the better one's financial attitude, the better at managing finances. In contrast to research that has been studied by Agarwalla et al., (2012); Gathergood, (2012); Ozdemir et al., (2015) concluded that it has no significant effect on financial literacy.

Based on the various discussions above, the authors connect all the variables that influence each other and the most. This research model is a replica of the research of Isomidinova & Singh, (2017) and Chmelikova, (2015), which consists of independent variables financial education, financial socialization agents, money attitude, financial knowledge, financial behavior, and financial attitude, and then the dependent variable. financial literacy, with below hypothesis:

- H1: Financial education has a significant positive effect on financial literacy.  
H2: Financial socialization agents have a significant positive effect on financial literacy.  
H3: Money attitude has a significant positive effect on financial literacy.  
H4: Financial knowledge has a significant positive effect on financial literacy.  
H5: Financial behavior has a significant positive effect on financial literacy.  
H6: Financial attitude has a significant positive effect on financial literacy.

### **3. RESEARCH METHODS**

This study uses multiple linear regression analysis, which aims to determine the effect of two or more independent variables on the dependent variable. The results of the study were obtained using primary and secondary data which were then managed using the 22nd version of SPSS which was used to explain and provide an overview of the clear relationship between the independent variable and the dependent variable.

According to Ghozali (2013), the test is divided into several stages, starting with the outlier test, which aims to test whether the data that has been obtained has data deviations based on the z-score value. If the z-score threshold value is in the range  $> 3$  or  $< -3$ , then the data that exceeds the predetermined outlier limit will be deleted and not be continued in the next study. Next is the validity test used to determine whether a questionnaire is valid or not. Validity is assessed using the loading factor indicator, where the questionnaire will be declared valid if the loading factor value is  $> 0.60$ . Then it will be followed by a reliability test which aims to test the stability of a respondent's answer. Reliability is assessed using the reliability coefficient indicator, if the value of the reliability coefficient  $> 0.70$  is declared reliable.

The next stage of testing is the normality test which functions to determine whether the regression model is normally distributed or not. The normality test is assessed using a probability plot indicator, where the data is declared to meet normal assumptions if it follows the direction of the diagonal line or spreads around the diagonal line. The next stage is followed by a multicollinearity test which functions to test a regression model whether there is a correlation between the independent variables. The regression model can be said to be good if there is no correlation between independent variables with each other. A regression model can be said to be free from multicollinearity if it has a VIF (Variance Inflation Factor) value  $< 10$  and a tolerance value  $> 0.1$ . Then it will be continued with heteroscedasticity testing. This test aims to determine whether objects consisting of 3 or more samples have the same variant or not. Where a good regression model is characterized by no heteroscedasticity. The heteroscedasticity test is assessed by the scatter plot indicator, if it does not form a certain pattern or spreads above and below the number 0, it is stated that there is no heteroscedasticity.

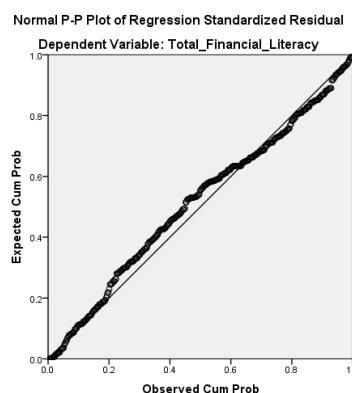
The next stage is the F test, which aims to determine the effect of the independent variable simultaneously on the dependent variable. The F Test assessment indicator is the significance value. The variable will be declared significant if it has a significance value  $< 0.05$ , which means that the independent variable has an influence on the dependent variant studied. On the contrary, if the significance value of the F test  $> 0.05$ , it is concluded that it has no effect and is not significant. Then proceed with the t test which intends to test the effect of the independent variable partially on the dependent variable. The assessment indicator is through the significance value. If the t test has a significance value  $< 0.05$ , it means that it has a significant effect on the dependent variable. If the significance value of the t test  $> 0.05$ , it does not have a significant effect on an individual basis. The last test is the

determination coefficient test which is conducted to determine how much the ability of the independent variable to explain the dependent variable well. The value of the coefficient of determination is between the numbers 0 and 1. If the adjusted R square results close to number 1, then the potential for the independent variable to explain the dependent variable is also greater. Conversely, if the result is close to the number 0, then the ability of the independent variable to explain the dependent variable is getting lower.

#### 4. RESULT AND ANALYSIS

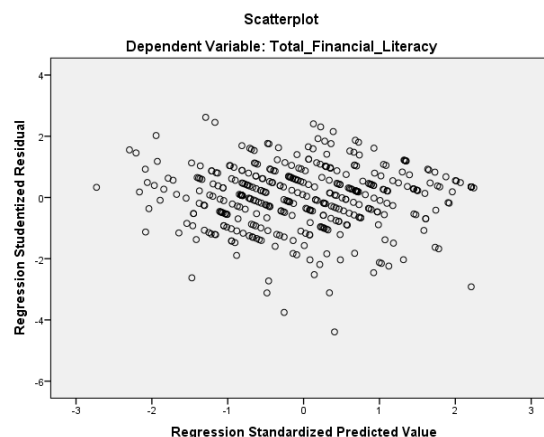
Sources of data used in this data collection technique are primary data collected by researchers by distributing questionnaires to the intended respondents. The data to be managed in this study were collected from online questionnaires to students in the city of Batam. This questionnaire survey was filled with as many as 410 respondents, but there were data that did not meet the criteria so that the data used in the test was 402.

The following are the results of the normality test, the probability plot shows the data is scattered around the diagonal line, so it can be concluded that the processed data is normally distributed.



Picture 1 Normality Test, Source: Primary Data Processed (2018).

The multicollinearity test results showed that the independent variable studied did not occur multicollinearity, because it had a value of  $VIF < 10$  and  $tolerance > 0.10$ . The following are the results of the heteroscedasticity test, the scatter plot shows the results that the regression model does not form a pattern, so there is no heteroscedasticity.



Picture 2 Heteroscedasticity Test, Source: Primary Data Processed (2018).



The following are the results of the F test which shows a significance value > 0.05, which means that all independent variables have a simultaneous effect on the dependent variable.

Table 1 F Test

<b>Model</b>	<b>F</b>	<b>Sig.</b>	<b>Result</b>
<b>Regression</b>	64.06	0,00	Significant

Source: Primary Data Processed (2018).

The following are the results of the t test:

Table 2 t Test

<b>Variable</b>	<b>B</b>	<b>Sig</b>	<b>Result</b>
Financial Education	-0,01	0,81	Not Significant
Financial Socialization Agents	-0,03	0,46	Not Significant
Money Attitude	0,14	0,00	Significant
Financial Knowledge	0,52	0,00	Significant
Financial Behavior	0,17	0,00	Significant
Financial Attitude	0,03	0,49	Not Significant

Source: Primary Data Processed (2018).

H1: Financial education has a significant positive effect on financial literacy.

The t test results indicate that the financial education variable does not have a significant effect on financial literacy, which means that the first hypothesis is rejected. This is in accordance with the results of previous research by Aggarwal & Gupta, (2014). However, it is different from the research studied by Isomidinova & Singh, (2017); Ahmad, Mawar, & Ripain, (2016); Albeerdy & Gharleghi, (2015); Thapa & Nepal, (2015); Bayrakdaroglu & SAN, (2015) which states that financial education has a significant positive effect on financial literacy.

H2: Financial socialization agents have a significant positive effect on financial literacy.

The results of the t test show that financial socialization agents have no significant effect on financial literacy, which means that the second hypothesis is rejected. This is in accordance with the results of previous research by Albeerdy & Gharleghi, (2015). However, it is different from the research researched by Isomidinova & Singh, (2017) and Sohn, Joo, Grable, Lee, & Kim, (2012) which state that financial socialization agents have a significant positive effect on financial literacy.

H3: Money attitude has a significant positive effect on financial literacy.

The t test results indicate that money attitude has a significant positive effect on financial literacy, which means that the third hypothesis is accepted. This is in accordance with the results of previous studies by Albeerdy & Gharleghi, (2015) and Sohn et al., (2012). In contrast to the research of Isomidinova & Singh, (2017) which states that money attitude does not have a significant effect on financial literacy.

H4: Financial knowledge has a significant positive effect on financial literacy.

The t test results indicate that financial knowledge has a significant positive effect on financial literacy, which means that the fourth hypothesis is accepted. This is in accordance

with the results of previous studies Abdullah, Mohammed, Salleh, & Rashid, (2017); Ahmad et al., (2016); Akram, Abbas, & Draz, (2016); Chmelikova, (2015).

H5: Financial behavior has a significant positive effect on financial literacy.

The t test results indicate that financial behavior has a significant effect on financial literacy, which means that the fifth hypothesis is accepted. This is in accordance with the results of previous studies by Chmelikova, (2015); Potrich, Vieira, Coronel, & Bender Filho, (2015); Jorgensen & Savla, (2010); Garg & Singh, (2017). There is a difference in the results of research by Abdullah et al., (2017) and Akram et al., (2016) which say that financial behavior has no significant effect on financial literacy.

H6: Financial attitude has a significant positive effect on financial literacy.

The t test results indicate that financial attitude does not have a significant effect on financial literacy, which means that the sixth hypothesis is rejected. These results are in accordance with previous studies by Ozdemir, Temizel, Sonmez, & ER, (2015); Agarwalla, Barua, Jacob, & Varma, (2012); Gathergood, (2012). In contrast to the research of Abdullah et al., (2017); Kadoya & Khan, (2017); Akram et al., (2016); Potrich, Vieira, & Mendes-Da-Silva, (2016) and Jorgensen & Savla, (2010) which state that financial attitude has a significant positive effect on financial literacy.

The following is the result of the coefficient of determination test

Table 3 Determination Coefficient Test Results

<b>R Square</b>	<b>Adjusted R square</b>
0,493	0,485

Source: Primary Data Processed (2018).

## 5. CONCLUSION

The results of research on financial education, financial socialization agents, money attitude, financial knowledge, financial behavior, financial attitude towards financial literacy show an adjusted R square value of 0.485, meaning that 48.5% of financial literacy variables can be explained by the independent variables contained in this study. While the remaining 51.5% is explained by other factors not included in this research model. On the other hand, the results of this study also show that money attitude, financial knowledge, and financial behavior have a significant effect on financial literacy. Meanwhile, the other three variables, namely financial education, financial socialization agents, and financial attitude do not have a significant effect on financial literacy.

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