



The Influence of Financial Literacy and Financial Technology on Bank Account Opening Mediated by Financial Behavior (Study in West Jakarta)

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ABSTRACT

Bank account opening in the past few years has not increased significantly. People who open accounts can still be said not to compensate for technology and the influence of one's financial behavior which is very influential in opening an account at the Bank. This study has several objectives, namely to determine the effect of financial literacy, financial technology, and financial behavior on opening bank accounts, and to identify whether financial behavior can mediate the effect of financial literacy and financial technology on opening bank accounts. This study uses the type of data Primary data taken directly from customers who want to open a bank account. The research sample was 125 respondents and the Regression Method was used for data analysis. The results of this study are Financial Literacy and Financial Technology have a positive and significant effect on Financial Behavior, Financial Literacy is not significant to Opening an Account at the Bank. Financial Technology has a positive and significant effect on opening an account at the Bank. Financial Behavior mediates the effect of Financial Literacy and Financial Technology on Opening an Account at the Bank.

Keywords: *Financial Literacy, Financial Technology, Financial Behavior, Bank Account Opening*

1. INTRODUCTION

Bank account opening in the past few years has not increased significantly. We know that Covid-19 encourages people to do all their activities at home or virtually. This encourages banks to provide facilities to open virtual accounts. The development of technology is growing rapidly from 2020 - 2022 compared to previous years. Covid-19 has also changed the work system of the community and we can see that initially entered the office every day but had to work at home.

The use of digital banking services cannot necessarily be used easily by customers, many customers still experience difficulties and errors in opening accounts plus many doubts in opening accounts due to rampant fraud through technology. A lack of financial literacy makes a person's behavior in finance in a negative direction.

With the phenomenon of an insignificant reduction in bank account creation in the last 3 years. This is strongly influenced by one's behavior in finance. The application of financial literacy and the use of technology in finance are factors that influence a person's financial behavior, as

one of them is a customer's interest in opening a bank account.

Based on the above problems, this research was conducted to find out what factors determine customers to open bank accounts. This study has several objectives, namely whether financial literacy, financial technology, and financial behavior affect a person's interest in opening an account.

The research objective is to identify whether financial behavior can mediate the effect of financial literacy and financial technology on opening a bank account.

2. LITERATURE REVIEW

Korkmaz et.al (2021) state that financial literacy has a positive effect on risk-taking. They argue that financial literacy reduces risk aversion and increases risk seeking. Ingale and Paluri's study (2020) revealed that financial literacy has a positive effect on a person's financial behavior.

Wu et.al (2020) reveal that financial technology has a positive effect on financial behavior. High financial technology increases the growth of tourism and the

economy of OECD countries, but if it exceeds the limits set in the long run it can reduce the country's economic growth. The study by Hua et.al (2019) revealed that financial literacy has a positive effect on financial behavior.

In line with Hua et.al (2019), Lusardi and Mitchell's (2014) study concluded that financial literacy has a positive effect on financial behavior. According to them, financial literacy determines the financial behavior of people in the United States, especially in terms of social security, credit, and household budgets. In addition, financial literacy also has a positive effect on household financial activities in the United States.

Andreou and Anyfantaki (2014) revealed that financial literacy has a positive effect on financial behavior. This indicates that financial behavior determines a person's financial literacy in using bank products such as opening an account using i-banking.

Maruf (2021) states that financial technology has a positive effect on financial behavior. With the increase in FinTech, it can help the performance of its customers' financial activities.

Kalwij et al. (2019) state that financial literacy has a positive effect on financial behavior. According to them, financial literacy determines a person's use of bank products, namely opening an account at a bank.

A study conducted by Coda, Moscarola, and Kalwij (2018) revealed that financial literacy has a positive effect on financial behavior. They argue that better financial literacy and more awareness of the importance of saving increase children's desire to open a bank account. Likewise, Broby (2021) concluded that financial technology has a positive effect on financial behavior. the better the financial technology, the more confidence a person will have in using bank services and is willing to use products from the bank.

Bella, Brawijaya, and Dewi (2021) state that public understanding or financial literacy has a positive and significant effect on opening bank accounts.

Nizar (2017) states that Fintech has a positive and significant effect on financial behavior.

Wicaksono (2015) states that financial literacy has a positive effect on financial behavior.

Based on the summary above, it can be concluded into seven hypotheses, namely:

- H1: Financial Literacy has a positive effect on Financial Behavior.
- H2: Financial Technology has a positive effect on Financial Behavior.
- H3: Financial Literacy has a positive effect on Bank Account Opening.
- H4: Financial Technology has a positive effect on Bank Account Opening.
- H5: Financial Behavior has a positive effect on Bank Account Opening.
- H6: Financial Behavior mediates the effect of Financial Literacy on Bank Account Opening.

H7: Financial Behavior mediates the effect of Financial Technology on Bank Account Opening.

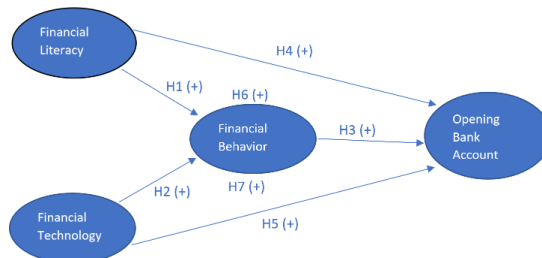


Figure 1. Research Model Pictograph

3. METHODOLOGY

This research was conducted from January to July 2023 with the research subject being all people who have a bank account or do not have a bank account. The population of this study is the West Jakarta community of 2,590,000 people. The sampling method used was purposive sampling, by selecting a sample of 125 respondents. The data analysis technique used in this study is multiple linear regression analysis and path analysis with the Sobel Test.

4. RESULT AND DISCUSSION

4.1. Validity Test

	Average Variance Extracted (AVE)
FINANCIAL LITERACY	0.543
OPENING OF BANK ACCOUNT	0.580
FINANCIAL BEHAVIOR	0.614
FINANCIAL TECHNOLOGY	0.551

From the validity test results for all variables; above it can be seen that all question items are valid and can be used in this study because the AVE value of all variables is greater than the standard value of 0.5.

4.2. Reliability Test

	Cronbach's Alpha
FINANCIAL LITERACY	0.788
OPENING OF BANK ACCOUNT	0.642
FINANCIAL BEHAVIOR	0.842
FINANCIAL TECHNOLOGY	0.797

From the reliability test results for all variables; above it can be seen that all question items are reliable and can be used in research because the Cronbach Alpha value of all these variables is greater than the standard value of 0.5.

4.3. Model Fit Test

	Saturated Model
SRMR	0.081

Based on the model fit test above, it can be seen that this research model is feasible to use because the SRMR value is less than 0.10.

4.4. Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
FINANCIAL_LITERACY	152	15	25	22.24	2.400
FINANCIAL_TECHNOLOGY	152	12	25	20.33	2.985
FINANCIAL_BEHAVIOR	152	13	25	20.42	3.057
OPENING_OF_BANK_ACCOUNT	152	8	15	13.43	1.626

4.5. Coefficient of Determination Test

	R Square
OPENING OF BANK ACCOUNT	0.254

The coefficient of determination of this study (r square) is 0.254, which means that 25.4% of the variation in bank account opening can be explained by variations in the variables of financial literacy, financial technology, and financial behavior. while the remaining 74.6% is explained by other factors not examined in this study.

4.6. T-Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
FINANCIAL LITERACY -> OPENING OF BANK ACCOUNT	0.165	0.173	0.091	1.809	0.071
FINANCIAL LITERACY -> FINANCIAL BEHAVIOR	0.404	0.404	0.059	6.887	0.000
FINANCIAL BEHAVIOR -> OPENING OF BANK ACCOUNT	0.216	0.211	0.102	2.119	0.035
FINANCIAL TECHNOLOGY ->	0.224	0.232	0.084	2.658	0.008

OPENING OF BANK ACCOUNT					
FINANCIAL TECHNOLOGY -> FINANCIAL BEHAVIOR	0.450	0.454	0.061	7.394	0.000

From the table above, it can be seen that Financial Literacy does not significantly have a positive effect on opening a bank account, with a p-value of 0.071 greater than 0.05.

Financial Literacy has a significant positive effect on financial behavior. with a p-value of 0.000 less than 0.05. Likewise, Financial behavior with a p-value of 0.035 <0.05, Financial Technology with a p-value of 0.008 <0.05, which has a significant positive effect on opening a bank account, and Financial Technology with a p-value of 0.000 have a significant positive effect on Financial Behavior.

4.7. Structural Regression Model:

Structure Equation Model 1:

$$PRBank = 0.165LK + 0.224TK + 0.216PF$$

Structure Equation Model 2:

$$PF = 0.404LK + 0.450TK$$

PRBank: Opening of Bank Account

LK: Financial Literacy

TK: Financial Technology

PF: Financial Behavior

Structure Equation Model 1 shows the test results that

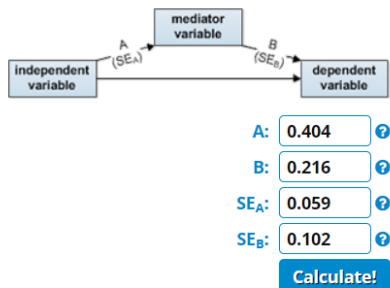
Financial Literacy variable has a significant positive effect on Opening a Bank Account. this means that the higher the Financial Literacy, the higher the intention to open a bank account. the Financial Technology variable has a significant positive effect on Opening a Bank Account. these results prove that the higher the Financial Technology, the higher the intention to open a bank account. the Financial Behavior variable has a significant positive effect on Opening a Bank Account. these results show evidence that the higher the financial behavior, the higher the intention to open a bank account.

Structure Equation Model 2 shows the test results:

Financial Literacy and Financial Technology variables have a significant positive effect on bank account opening. this result shows that the higher the Financial Literacy and Financial Technology, the higher the Financial Behavior.

4.8. Path Analysis

4.8.1. Financial Behavior Variables Mediate the Effect of Financial Literacy Variables on Bank Account Opening Variables

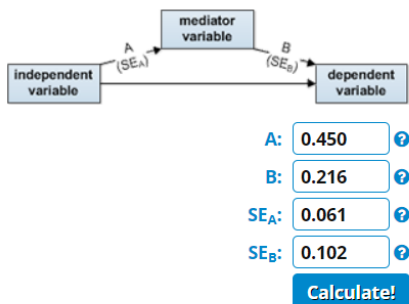


Sobel test statistic: 2.02310886
 Two-tailed probability: 0.04306193

A: FINANCIAL LITERACY REGRESSION COEFFICIENT: 0.404
 B: FINANCIAL BEHAVIOR REGRESSION COEFFICIENT: 0.216
 SEA: FINANCIAL LITERACY STANDARD DEVIATION: 0.059
 SEB: FINANCIAL BEHAVIOR STANDARD DEVIATION: 0.102
 SOBEL TEST P-VALUE: 0.043

based on the results of the Sobel test above, it can be concluded that the Financial Behavior variable significantly positively mediates the effect of the Financial Literacy variable on the bank account opening variable, this is indicated by the Sobel test p-value of 0.043 which is smaller than 0.05.

4.8.2. Financial Behavior Variables Mediate the Effect of Financial Technology Variables on Bank Account Opening Variables.



Sobel test statistic: 2.03544388
 Two-tailed probability: 0.04180623

A: FINANCIAL TECHNOLOGY REGRESSION COEFFICIENT: 0.450
 B: FINANCIAL BEHAVIOR REGRESSION COEFFICIENT: 0.216
 SEA: FINANCIAL LITERACY STANDARD DEVIATION: 0.061
 SEB: FINANCIAL BEHAVIOR STANDARD DEVIATION: 0.102
 SOBEL TEST P-VALUE: 0.041

Based on the results of the Sobel Test above, it can be concluded that the Financial Behavior variable significantly positively mediates the effect of the Financial Technology variable on the bank account opening variable, this is indicated by the Sobel Test P-Value of 0.041 which is a smaller than 0.05.

4.9. Discussion

Below is a discussion based on the results of hypothesis testing in the previous section.

4.9.1. Effect of Financial Literacy on Financial Behavior

Financial Literacy has a significant positive effect on Financial Behavior. The results of this study support the results of research conducted by Korkmaz, et al (2021) and Ingale and Paluri. (2021), Their research gives the result that Financial Behavior has a positive and significant influence on Bank Account Opening. From these results, it can be seen that Financial Literacy is the main determinant of Financial Behavior. Financial Literacy means investment, credit loans, the use of savings, and insight into money control. this is closely related to increasing literacy, a person will gain confidence and confidence in their finances. in everyday life, many people believe more in rotating their money in the form of business goods. with this Financial Literacy makes a person manage their finances. where to get profit can use other financial instruments in this case investment. As Korkmaz and Paluri argue Financial Literacy has a positive influence because Financial Literacy provides knowledge that can change a person's mindset and decisions in their finances.

4.9.2. Effect of Financial Technology on Bank Financial Behavior

Financial Technology has a significant effect on Bank Account Opening. Thus, the results of this study support the results of research conducted by Nizar (2017) and Maruf (2021), their research shows that Financial Technology has a positive and significant effect on Bank Account Opening. From these results, it can be seen that Financial Technology is the main determinant of Financial Behavior.

4.9.3. *Effect of Financial Literacy on Bank Account Opening*

The results of the t-statistical test show a significance value of 0.071. The significance value of t is smaller than 0.05 ($0.071 > 0.05$). Thus, it can be concluded that the Financial Literacy variable is not significant to Bank Account Opening. Thus, the results of this study contradict the results of research by Korkmaz, et al (2021) and Ingale and Paluri. (2021), Their research gives the result that Financial Literacy has a positive and significant influence on Bank Account Opening. While the results of this study show the opposite result. From these results, it can be seen that Financial Literacy is not the main determinant of Bank Account Opening.

4.9.4. *Effect of Financial Technology on Bank Account Opening*

The results of the t-statistical test show a significance value of 0.008. The significance value of t is smaller than 0.05 ($0.008 < 0.05$). Thus, it can be concluded that the Financial Technology variable has a significant effect on Bank Account Opening. Thus, the results of this study support the results of research by Broby (2021) and Nizar (2017), their research shows that Financial Technology has a positive and significant effect on Bank Account Opening. From these results, it can be seen that Financial Technology is the main determining factor in Bank Account Opening. The development of technology that helps customers does not need to do the traditional way where customers have to go to the bank to open an account. One example is Jenius from BTPN. Until now, many BTPN Bank customers open through the application. This can increase the number of new account openings. for customers is very helpful because anytime and anywhere can create an account. Whether it is a new customer or a customer who already has an account at BTPN Bank. One of these examples reflects Broby and Nizar's theory that technology helps increase account opening in a bank.

4.9.5. *Effect of Financial Behavior on Bank Account Opening*

Financial Behavior has a significant positive effect on bank account opening. Thus, the results of this study support the results of research by Wicaksono (2015) and Andreou and Anyfantaki (2014), their research results that Financial Behavior has a positive and significant effect on Bank Account Opening. From these results, it can be seen that Financial Behavior is the main determining factor of Bank Account Opening. Financial Behavior is very supportive of opening an account. Financial Behavior supports a person in making decisions. This behavior will make customers confident in opening accounts in the example of customers who need US dollar accounts. Then they can choose to open a dollar account at the bank that they think is right. Financial Behavior hinders a person from deciding to open an account. There is a possibility of distrust that occurs, for example, they save US dollars but are charged an administration fee in dollars. This makes them feel afraid to open an account.

Like the opinion of Wicaksono and Andreou, Financial Behavior gives customers confidence in opening an account that suits their needs without Financial Behavior mediating literacy and technology will make customers hesitate in making decisions to open an account.

4.9.6. *Mediation of Financial Behavior in the Effect of Financial Literacy on Bank Account Opening*

The results of the Sobel test show that the Financial Behavior variable significantly mediates the positive effect of Financial Literacy on bank account opening. Thus, the results of this study support the results of research by Wicaksono (2015) and Andreou and Anyfantaki (2014), their research provides the result that Financial Behavior mediates the effect of Financial Literacy on Bank Account Opening. From these results, it can be seen that Financial Behavior is the main determinant of Bank Account Opening, as well as being an intermediary in determining Bank Account Opening. The positive effect of one's Financial Literacy on the intention to open a bank account will be even more positive when one's Financial Literacy increases.

4.9.7. *Mediation of Financial Behavior in the Effect of Financial Technology on Bank Account Opening*

The results of the Sobel test show that the Financial Behavior variable significantly mediates the positive effect of Financial Technology on bank account opening. Thus, the results of this study support the research results of Wicaksono (2015) and Broby (2021), their research provides the result that Financial Behavior mediates the effect of Financial Technology on bank account opening. From this result, it can be seen that Financial Behavior is the main mediating factor of bank account opening intention. Thus, the positive effect of Financial Technology on the intention to open a customer bank account will be more positive when Financial Technology increases.

5. CONCLUSION

Based on the results of data analysis and discussion results, the conclusions that can be drawn are as follows:

Financial Literacy and Financial Technology significantly have a positive effect on Financial Behavior. The higher the Financial Literacy and supported by Financial Technology, the higher the customer's Financial Behavior.

Financial Behavior significantly positively mediates the effect of Financial Literacy and Financial Technology on customers' bank account opening intention. These results conclude that the positive effect of Financial Literacy and Financial Technology will further increase the intention of a customer to open a bank account when his Financial Behavior increases.

SUGGESTIONS

Based on the results of the data analysis also suggest for banks and prospective customers who will open an account. Financial Literacy and Financial Technology are very important in determining the behavior of prospective customers to open their accounts so that they match the purpose of opening each customer's account. For the banking industry, it is very important to educate prospective customers about financial knowledge and Financial Technology. Increasing customer knowledge about literacy and Financial Technology will make it easier for prospective customers to open an account. This journal also illustrates how people agree that improvements in literacy and technology make it easier for customers to open accounts.

Suggestions for further research, it can be seen that from the sample supporting the increase in literacy and technology makes it easier for customers, banks are expected to create programs to support prospective customers or the community to increase literacy and Financial Technology. This will make it easier for prospective customers and banks that open accounts for them. This journal can be taken as a reference so that further research can add new variables in subsequent studies such as in one's investment.

AUTHORS' CONTRIBUTIONS

This article adds to the research on opening bank accounts in banking, which is driven by financial behavior, technology, and literacy. The Author's goal is to define and clarify how behavior, technology, and literacy all play a significant role in opening a bank account.

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