Financial Literacy and Motivation to Stimulate Saving Behavior Intention in form of Bank Customer Deposits

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ABSTRACT: One of the indicators of how well a country's economic health can be seen by the availability of funds to support development. The banking industry is one of the institutions that has an impact on the public's ability to access funds. Factors of fundamental finance and behavioral finance can influence individuals or groups of people to save their money in banks, particularly in the form of deposits. This study aims to determine how much behavioral finance and social environment can influence a bank customers' interest in saving through deposits The analysis technique used are Path Analysis. The type of data are primary data from questionnaire distribution, The Likert scale were used for variable measurement. Results showed that financial literacy did not affect customer's interest to save money in the form of deposits. Meanwhile, social environment cannot be used as an intervening variable for financial literacy and motivation towards customer's interest to save their money in the form of deposits

KEYWORDS: Financial Literacy, Motivation, Environment Social, Saving Intention

I. INTRODUCTION

The covid pandemic had an effect on Indonesia's economic growth, which is now beginning to recover in 2022. Pandemic of the long-lasting covid that occurred between 2020 and 2021. The government must promote economic growth at all societal levels, including that of small and medium-sized enterprises (SMEs), micro small and medium-sized enterprises (MSMEs), and new startup businesses. The government's involvement aims to increase economic activity in order to provide citizens with more purchasing power. It is impossible to separate the influence that financial institution, including banks, play in a nation's economic development.

Banks are intermediary institutions between parties who have excess funds, especially from third parties and those who need funds or debtors [1]. The effectiveness of fund management performed by banks in a nation has an effect on raising the nation's economic level. The increase of economy indicates that people's welfare is also increasing and the increase of people's welfare will impact investment growth The fact that more and more people have savings, including bank savings, makes it one of the simplest types of public investment to be made The high level of public savings affects how high the availability of funds for parties in need, whether they are individuals, institutions, or businesses. One way to increase third party funds is savings that can be withdrawn at any time, current accounts, and term savings (deposits), since the public trust in these bank institutions. There is a high degree of public trust since it is balanced with the disclosure of bank health and the simplicity of the product usage that promotes savings. The existence of trust and disclosure of information can encourage public interest in saving money in banks, especially in the form of deposits.

Interest shows a person's desire, motivation, which will encourage someone to do something they want[2]. As stated by [3], one can tell if someone is interest in investing by the amount of effort they put into learning, practicing and researching different types of investments. The curiosity to know more about savings, especially time deposits, will be accompanied by an extensive research in order to gather data to be taken into consideration before making a decision. A person's interest in saving can be triggered by a variety of factors. The behavioral finance factors used in this study are financial literacy, motivation and social environment as a mediator. The theory that is used to explain the interest in saving is Theory of Planned Behavior [4], [5]. Financial Literacy, according to [6] is the ability to read, analyze, manage and write about finances that have an impact on daily life. This is also stated by [7], [2] and it refers to the ability to process information and make personal decision. Today's society is very dynamic especially with the information technology breakthroughs, which allows us to immediately obtain valid information

from a variety of information sources. With the increased knowledge, the greater the ability to read, to understand and to analyze information which increase the desire, for example the urge to save, particularly in the form of deposits. A person's interest in saving will be higher if the social environment supports investment activities, especially in term savings (deposits). Because environmental factors, whether it's positive or negative, will affect interest in saving in the form of deposits. Research gaps occur in the research results of [2] dan [8]. The result of the study [2] show that financial literacy has a positive influence on investment interest. While the results of [8] show that financial literacy has little influence on investment decisions

According to [2] motivation is what drives someone to improve their behavior in order to satisfy their needs. A person's interest in putting a strong drive into action will be significantly influenced by the presence of a supporting will and desire. Each person's psychology tends to have considerable influence on their financial behavior while making decisions [9], [8]. As it is, also stated by [10] that a person's choices when making any kind of investment, such as purchasing stocks, will be influenced by their financial behavior. This behavior or action is driven by the desire to improve in the future. By investing, particularly in terms of saving, namely term savings or deposits. Before realizing it, there needs to be motivation to generate interest in saving while considering that doing so will provide more benefits both for now and in the future. The higher a person's motivation, the more interested they are in saving. This result is supported by the findings of [2] showing that motivation has a positive impact on investment interest. This will strengthen the interest in saving if the social environment encourages saving and cares about its advantages. Based on this description, this study aims to analyze how financial behavior factors influences Bank of Surabaya's desire to save in term savings or deposits. Based on these explanations and descriptions, the hypothesis of this research is as follows

H1. Financial literacy has a positive effect on interest in saving in time saving (deposits) for bank customers in Surabaya

H2. Motivation has a positive influence on interest in saving in term savings (deposits) for bank customers in Surabaya

II. LITERATURE REVIEW

Theory of Planned Behavior

The Foundation of the Theory of Planned Behavior or TPB is a perspective of a person's belief that can influence a more specific behavior. The article "From Intentions to Actions: A Theory of Planned Behavior" by [4] discusses the connection between beliefs and attitudes. The three components from the two interactions are behavior beliefs, normative beliefs, and control beliefs. Behavioral beliefs are notions about potential results and evaluations of behavior. Normative beliefs are beliefs that the expected norms and the motivations that can meet expectations. Control beliefs are a person's belief that there are factors supporting and preventing a behavior as well as the awareness of the power of control. Control beliefs explains how individuals evaluate their attitudes towards the actions they take. This theory can also be used to estimate a person's tendencies in making choices when faced with a variety of options. It can be concluded that if we are aware of how strong someone's beliefs about a particular subject, we can predict how that person will act or behave

Saving Intention

Interest is said to be the source of motivation for people to take action to achieve their goals [11]. Interest itself can be demonstrated by a person's tendency, their level of beliefs, and their decision-making processes. As stated by Kinnear et al (2003) that the tendency to consume attitudes—that is, the desire to act—is a manifestation of buying interest as a component of consumer behavior. Long-term savings in the form of deposits are part of investing. [3] states that the characteristics of people who are interested in investing can be seen from the extent of their efforts into learning, practicing and researching different types of investments. The curiosity to know more, will be accompanied by an extensive research in order to gather data to be taken into consideration before making a decision. Lucas and Britt, S. (2003) employed five variables to measure interest in saving. These five indicators are attention, interest, desire, conviction, and decision.

Social environment

According to (Seong, Kai and Joo, 2011), social influence involves social training from an individual or group with the goal of altering other people's behavior in the desired direction. A person's social environment significantly influence their past behavior. [12] stated that the environment, which includes the family environment, the educational environment, and the community environment, has a significant impact on interest. This is supported by the study's findings (Seong, Kai, and Joo 2011), which show that parents' socialization of their children about the importance of saving during childhood has a significant impact on economic behavior from childhood to adulthood. The community environment includes student involvement in the neighborhood, local media, social gatherings, and other aspects of neighborhood life.

Financial Literacy

According to [6], financial literacy is the ability to read, analyze, manage and write about finances that have an impact on daily life

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Meanwhile, according to [7], financial literacy is the ability to process information and make personal decisions. The public has an urgent need for essential financial education. The necessary financial education is seriously needed in the community. Additionally, financial education provides people with accurate information and knowledge, particularly regarding time savings or time deposits. More recent knowledge and information may serve as the driving force behind a decision to save on deposit. Based on the study's findings [13], financial decision-making was influenced by one's level of financial literacy. Financial literacy, as defined by [14] is a person's ability to understand matters related to finance. Having good financial literacy will lead to a greater interest in investing, especially long-term savings in the right direction to avoid losses later. There are 5 indicators used to measure financial literacy referencing to the opinion of [15] the indicators are *Basic Personal Finance*, *Financial management, Credit and Debt Management , Savings and Investments, Risk management .*

Motivation

Uno (2012) states that motivation is the drive someone has to try to alter their behavior in a way that will better meet their needs. One of the theories of motivation is Abraham Maslow's theory of the hierarchy of needs, which also covers physiological, safety and security, social, esteem, and self-actualization needs. The hierarchy of needs is divided into lower-level wants, such as physiological and safety needs, which may be satisfied internally, and upper-level needs, such as self-actualization and esteem, which can primarily be satisfied externally. [16] Hypothesizes that social interaction can influence someone's decision to invest in the stock market. This shows that if friends, coworkers, and family members are very open and happy to engage in the capital market, then someone will be more interested in doing what people around them are interested in doing.

III. POPULATION AND SAMPLE

The population in this study are bank customers in Surabaya. Participants are special customers of commercial bank who don't have term savings account (deposits)..

IV. ANALYSIS METHODS

The analysis technique used are Path Analysis. Participants were selected by non-probability sampling. With the distribution of questionnaires, 82 participants were acquired, making the type of data primary data. The variables are measured using likert scale. Saving intention are measured using 4 indicators, namely beliefs in the benefits of saving [2], information seeking and the want to own (Lucas & Britt S, 2003), and the need for security from Abraham Maslow. Indicators used to measure Social environment are family environment, work environment and social media [12]. While, the indicators of financial literacy are basic personal finance, money management, saving, and investing [15]. There are 3 indicators for motivation, it is beliefs [17], and the return on investment [18]

V. RESEARCH RESULTS

Statistical Analysis

The figure below shows the effect of the independent variable on the dependent variable along with the intervening variable. The independent variable is in the form of financial literacy with notation X1 and motivation with notation X2. The dependent variable is saving intention with the notation Y. While the intervening variable is the social environment variable with the notation Z. The influence between variables is shown in Figure 1 below.
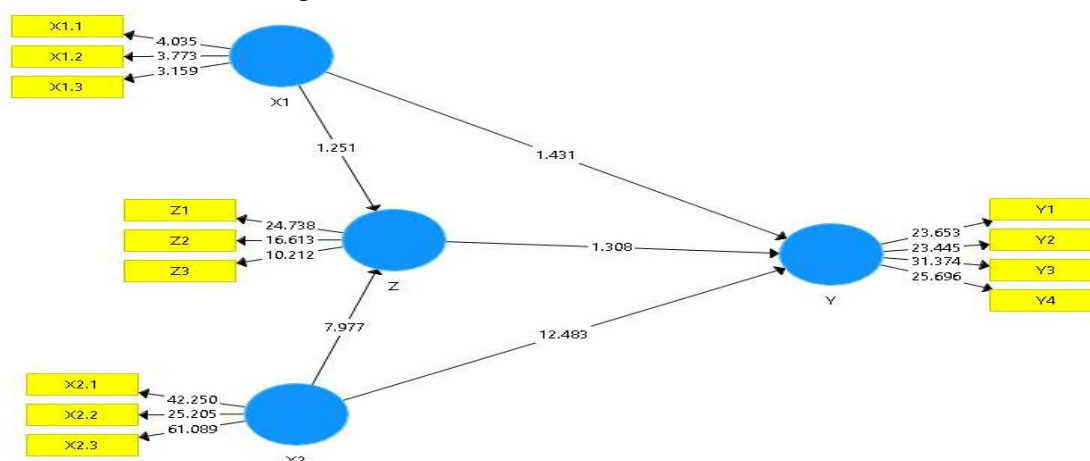

Figure 1.Direct testing

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Figure 1 shows that the outer loading value of all indicators is above 0.7 and shows that there is data validity. After validating the data, the next step is to evaluate the measurement model.

Measurement Model Evaluation

The evaluation of the measurement in this study is shown in table 1, which measures construct reliability and validity

Table 1. Construct Reliability and Validity

Variable	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extrancted (AVE)
Financial Literacy (X1)	0.731	0.753	0.845	0.645
Motivation (X2)	0.888	0.891	0.931	0.817
Saving Intention (Y)	0.901	0.902	0.931	0.771
Social environment (Z)	0.762	0.779	0.862	0.677

Source: Processed data

Table 1 shows that the Cronbach's alpha test and composite reliability values, which assess internal consistency, are both greater than 0.7. The Cronbach's alpha test results for all variables are greater than 0.7. These results show that the latent variables used in this study have a high internal consistency. While the internal consistency test for other models' suitability uses a composite reliability reliability test. According to Table 1, the composite reliability value for all the variables used is greater than 0.7. The composite reliability value of 0.7 demonstrates the high levels of internal consistency found across all research constructs.

As shown in table 1, the Average Variance Extracted (AVE) value also measures convergent validity. According to the convergent validity of this study, each indicator in this study has a positive relationship with other indicators in the same construct. Each construct in this study has an AVE result with a value greater than 0.5, indicating that each construct explains more than half of the study's indicators [19], [20]

The three findings are also supported by cross loading results, which measure discriminant validity. The results of the discriminant validity are shown in Table 2.

Table 2. Cross loadings

Indicator	Financial literacy (X1)	Motivation (X2)	Saving intention (Y)	Social environment (Z)
X1.1	0.849	0.084	0.000	0.236
X1.2	0.815	0.105	0.076	0.108
X1.3	0.743	0.213	0.104	0.165
X2.1	0.172	0.912	0.791	0.472
X2.2	0.189	0.869	0.706	0.578
X2.3	0.096	0.929	0.846	0.538
Y1	0.117	0.771	0.868	0.423
Y2	0.033	0.703	0.867	0.563
Y3	-0.029	0.764	0.891	0.506
Y4	0.114	0.800	0.885	0.499
Z1	0.215	0.570	0.534	0.861
Z2	0.102	0.404	0.387	0.844
Z3	0.224	0.440	0.450	0.759

Source: Processed data

Table 2 shows that the study's discriminant validity is achieved because the cross loading value of the intended construct is higher than the other construct. Additionally, the intended construct's cross loading value is higher than 0.7. The intended construct X1 (financial literacy) has a cross loading indicator value of 0.849, 0.815, and 0.743. The intended construct X2 (motivation) has a cross loading indicator value of 0.912, 0.869, and 0.929. The intended construct Y's cross loading indicator has the values 0.868, 0.867, 0.891, and 0.885. The construct Z's (Social environment) cross loading indicator has a value of 0.861, 0.844, and 0.759.

Construct Level Collinearity

The following step is to determine whether there is a correlation between the used constructs. A collinearity tests were carried to define this by using the inner VIF value displayed in table 3.

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Table 3. Inner VIF Value

Indicator	Financial literacy (X1)	Motivation (X2)	Saving intention (Y)	Social environment (Z)
Financial literacy (X1)			1.056	1.029
Motivation (X2)			1.524	1.029
Saving intention (Y)				
Social environment (Z)			1.562	

Source: Data Processed

According to table 3, the VIP value is less than 5. This proves that there is no correlation between the used constructs. Therefore, it can be concluded that this research fulfills the requirements of the research

Coefficient of Determination (R2)
The next step is to identify the potential influence of the exogenous latent variable on the endogenous latent variable, saving intention. The results of the R square test are displayed in Table 4.

Table 4. R Square

Variable	R Square	R Square Adjusted
Saving Intention (Y1)	0.763	0.754
Social Environment (Z)	0.360	0.343

Source: Processed Data

Table 4 demonstrates that saving intention has a coefficient of determination of 0.763, which indicates that the exogenous latent variable can explain 76.3% of the endogenous latent variable (saving intention), with the remaining explanation coming from other variables. The exogenous latent variables are financial literacy (X1), motivation (X2), and social environment (Z). The Social environment variable (Z) has a coefficient of determination of 0.360, meaning that only 36% of it can be explained by the variables financial literacy (X1) and Motivation (X2), with the remaining 74% being explained by variables not used in this study.

The Value and Significance of the Path Coefficient
The relationship between the variables studied which are stated in the hypothesis is shown in the path coefficient. The results of hypothesis testing with a significant level of research of 5% are shown in table 5.

Table 5. Mean, STDEV, T-Statistics, P-Value

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Conclusion
X1-> Y	-0.093	-0.092	0.065	1.431	**0.153**	Rejected
X2 -> Y	0.818	0.821	0.066	12.483	**0.000**	Accepted
X1-> Z -> Y	0.014	0.018	0.021	0.669	**0.504**	Rejected
X2 -> Z -> Y	0.061	0.059	0.045	1.342	**0.180**	Rejected

Source: Processed data

Table 5 displays the results of the hypothesis test and shows that the financial literacy (X1) P value is 0.153 in the negative direction. With a significant level of 5% used in the study, financial literacy (X1) has no effect on saving intention (Y) in a negative direction. While the hypothesis stated that financial literacy (X1) has a positive influence on saving intention (Y). Based on the results of hypothesis testing, the P value of 0.153 which is higher than the 5% level of significance. It can be concluded that the research findings do not match the hypothesis. The second hypothesis test results shows that motivation (X2) has a P Value of 0.000, which is less than the 5% level of significance and has a positive direction, indicating that the result match the hypothesis. The hypothesis states that motivation (X2) has a positive influence on saving intention (Y). Meanwhile, the social environment cannot be an intervening or mediating variable for both financial literacy (X1) and motivation (X2) on saving intention (Y). This is explained by the P values of the two independent variables, financial literacy (X1) being 0.504 and motivation (X2) being 0.180, both of which are greater than the level of significance 5%.

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VI. DISCUSSION

Financial literacy, as stated by [7] can be defined as the ability to process information and make personal decisions. According to [15] financial literacy can be measured with *Basic Personal Finance, Financial management, Credit and Debt Management, Savings and Investments, Risk management*. The test results of the first hypothesis stated that financial literacy has no effect on saving intention in a negative direction. This does not match the hypothesis stating that financial literacy has a positive effect on saving intention. These results show that even if someone has good literacy, it will not affect his interest in having a time deposit or savings and vice versa. This shows that even though they have good literacy in term savings, they are not interested in having term savings. Financial literacy has no impact on saving intentions, especially in deposits. It is unaffected because a person with good financial understanding and management can support their personal interests without the need for more funds on deposit, and the rest of their funds is better invested in real assets Another factor for not being interested in depositing is that, if you have money, you're more likely to store it in a savings account that can be withdrawn at any time. So that it does not interfere with activities that require cash-based financial transactions.

The other consideration to take into account is the fact that many people's incomes have decreased as the result of covid's prolonged presence. That affected people's income significantly for about 2 years. Moreover, the current price of goods tends to rise and not being matched by rising income. Due to this, incomes were primarily used for precautionary purposes rather than being deposited. This contrasts with the opinion of [14] that financial literacy encourages someone to become more interested in investing. Also, the social environment is incapable of mediating financial literacy and saving intention. The incapability of social environment including the family environment, the work environment, and the social media environment in mediating is because each individual has their own way of managing their finances. Therefore, even if a person has good literacy and a supporting environment, they are still unable to change their interest in saving money in the form of deposits because the funds they have is better used for their daily expenses and their urgent needs. Another reason may be due to their financial conditions, which makes them less likely to deposit and lowers their interest in doing so.

The second hypothesis states that motivation has a positive influence on saving intention. The results of this study support the hypothesis as the test results shows that motivation has a P value of 0.000, which is less than the 5% level of significance. This demonstrates that as long as there is something that can motivate people, the desire for deposits will exist. This happens as a result of a person's desire to carry out a pre-planned action. Additionally, it's due to the intention of not using the funds used to fulfill the desire for other needs. Someone is motivated to act when they have a strong sense of faith in the importance of making deposits will benefit them in the future. This faith is supported by someone's willingness to make future plans in for the use of deposits and deposits are considered as one of the safest investment options. Based on these reasons, motivation is used as the basis to change for the better in the future. Money can be managed by those who are capable of doing so, but it can also be saved in the form of bank deposits for future use. It was carried out after careful considerations. The more motivated someone to become better, the more likely they are to develop an interest in doing something and will eventually make a decision. Decisions are based on needs, according to Malayu's explanations of Maslow's theory of needs (2005). Maslow's theory discusses five hierarchies of human needs: physiological, security and safety, social, esteem, and self-actualization. Unmet needs and desires serves as motivation for people

VII. CONCLUSION

To generate a person's interest in something, it must be based on how much of their behavior leads to that interest. There are many factors that can affect a person's interest in having a deposit in a bank. Whether it is a behavioral or fundamental finance factor. Fundamental finance can be gained from a bank's financial statements, be it healthy or not. Behavioral finance, on the other hand, can be influenced by a person's level of financial literacy, their level of motivation to learn more about deposits, or by the social environment around them. Having good financial literacy may not also affect them in having deposits

There are many things that can cause a person's lack of interest in opening deposits, even though they have a good understanding of deposits. This lack of interest may be due to the lack of funds, having the ability to manage their own finances or the lack of flexibility to use funds in case of an unexpected transaction. Their financial literacy on high deposits will be balanced with the interest on deposits if they work hard enough and earn more income. Moreover, if there are no immediate investment plan, people tend to deposit their money to keep it safe until they decide to invest it or use it for other purposes. However, a person with high motivation will also have high curiosity, and by learning more about deposits, they will be more interested in depositing their money. Financial literacy and motivation for saving in the form of deposits cannot be mediated by the environment. This is caused by the environment cannot mediate both financial literacy and one's motivation in generating interest in saving in the form of deposits. This is caused by the participant's high education and their own stance and thought process when acting

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REFERENCES

1) M. Sari and Y. Yuniningsih, "Analisis Faktor Determinan Penyaluran Kredit Bank Konvensional Yang Terdaftar di Bursa Efek Indonesia," *J. Ekon.*, vol. 6, no. 2, pp. 165–175, 2022.

2) Y. Yuniningsih and B. Santoso, "Does Family Environment Moderate The Effect of Financial Literacy, Attitudes and Motivation on Investment Interest," *ATESTASI J. Ilm. Akunt.*, vol. 3, no. 2, 2020.

3) B. T. Cahya, "Pengaruh Motivasi dan Kemajuan Teknologi Terhadap Minat Investasi Saham," *Al-Masharif J. Ilmu Ekon. dan Keislam.*, vol. 7, no. 2, pp. 192–207, 2019.

4) I. Ajzen, "From intentions to actions: A theory of planned behavior," in *Action control*, Springer, 1985, pp. 11–39.

5) I. Ajzen, "The theory of planned behaviour: reactions and reflections." Taylor & Francis, 2011.

6) L. A. Vitt, *Goodbye to complacency: Financial literacy education in the US 2000-2005*. AARP, 2005.

7) S. Cole and N. Fernando, "Assessing the importance of financial literacy," *ADB Financ. Poor*, vol. 9, no. 2, pp. 1–6, 2008.

8) Y. Yuniningsih and B. Santoso, "Antecedents and Consequences of Psychological Aspects of Investors in the Real Asset Sector Towards Investment Decision Making," *ATESTASI J. Ilm. Akunt.*, vol. 4, no. 2, pp. 301–314, 2021.

9) Y. Yuniningsih, F. Ismiyanti, I. M. Narsa, A. I. Mawardi, and B. Suhada, "Risk Taking Investment as the Interaction Effect of Loss Aversion and Information (Pilot Test)," *Calitatea*, vol. 21, no. 175, pp. 107–112, 2020.

10) T. Pertiwi, Y. Yuniningsih, and M. Anwar, "The biased factors of investor's behavior in stock exchange trading," *Manag. Sci. Lett.*, vol. 9, no. 6, pp. 835–842, 2019.

11) Yuniningsih, B. Santoso, N. F. Zhafirah, D. Rachmayanti, and D. Anggraini, "Lecturer's Behavior Finance in Making Investment Decisions on Financial Assets from the Perspective of Psychological Factors," vol. 5, no. 2, pp. 101–109, 2022.

12) M. Ginting and E. Yuliawan, "Analisis faktor-faktor yang mempengaruhi minat berwirausaha mahasiswa (studi kasus pada STMIK Mikroskil Medan)," *J. Wira Ekon. Mikroskil*, vol. 5, no. 1, pp. 61–70, 2015.

13) E. Aryeetey, "Household asset choice among the rural poor in Ghana," *Inst. Stat. Soc. Econ. Res. Univ. Ghana*, 2004.

14) Y. Yuniningsih and M. Taufiq, "INVESTOR BEHAVIOR IN DETERMINING INVESTMEN ON REAL ASSET," *Mix J. Ilm. Manaj.*, vol. 9, no. 2, p. 293227, 2019.

15) L. Mandell and L. S. Klein, "Motivation and financial literacy.," *Financ. Serv. Rev.*, vol. 16, no. 2, 2007.

16) H. Hong, J. D. Kubik, and J. C. Stein, "Social interaction and stock-market participation," *J. Finance*, vol. 59, no. 1, pp. 137–163, 2004.

17) I. Ajzen, "Constructing a TPB questionnaire: conceptual and methodological considerations. 2002." 2006.

18) N. Aini, M. Maslichah, and J. Junaidi, "PENGARUH PENGETAHUAN DAN PEMAHAMAN INVESTASI, MODAL MINIMUM INVESTASI, RETURN, RISIKO DAN MOTIVASI INVESTASI TERHADAP MINAT MAHASISWA BERINVESTASI DI PASAR MODAL (STUDI PADA MAHASISWA FAKULTAS EKONOMI DAN BISNIS KOTA MALANG)," *J. Ilm. Ris. Akunt.*, vol. 8, no. 05, 2019.

19) J. F. Hair, C. M. Ringle, and M. Sarstedt, "PLS-SEM: Indeed a silver bullet," *J. Mark. theory Pract.*, vol. 19, no. 2, pp. 139–152, 2011.

20) J. F. Hair Jr, L. M. Matthews, R. L. Matthews, and M. Sarstedt, "PLS-SEM or CB-SEM: updated guidelines on which method to use," *Int. J. Multivar. Data Anal.*, vol. 1, no. 2, pp. 107–123, 2017.