Financial Literacy Affects Financial Behavior Through Financial Attitude as an Intervening Variable

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Abstract:- Good financial behavior is needed nowadays to face an era where spending money or saving money is straightforward. Generation Z is a consumptive generation, so this study aims to determine the financial behavior of generation Z. The sample used in this study were 200 respondents. Data analysis techniques using Structural Equation Modeling (SEM) Partial Least Square. The results showed that financial literacy affected financial behavior through financial attitude.

Keywords:- Financial Literacy; Financial Attitude; Financial Behavior;

I. INTRODUCTION

Generation Z is a generation born in 1995 – 2010[1]. Generation Z is very fluent in technology. They are a digital generation proficient and literate in information technology and various computer applications. According to data from the National Socio-Economic Survey (Susenas) conducted by Badan Pusat Statistik (BPS) in March 2019 to 320,000 sample households, the Gen Z ratio reached 25.05% the population of Indonesia. Gen Z makes up the largest share of Indonesia's people today. Together with the two generations above, gen Y was born between 1980-1994 (23.24%), and Gen X was born between 1965-1979 (19.54%); the productive age population in Indonesia reached 67.83%.

Gen Z has now graduated from college and entered the workforce. Growing up, Gen Z has made its own decisions about which products it will buy and use. To understand Gen Z's shopping behavior, *McKinsey & Company (McKinsey)* surveyed more than 16,000 consumers in 6 Asian and Pacific countries, namely Australia, China, Indonesia, Japan, South Korea, and Thailand second half of 2019[3]. The results showed that gen Z prefers products that are being discounted, and they tend to be more consumptive.

Living in a modern era where a world is more financially driven than trade-driven as its characteristic leads to a quality of life depends on an individual's capacity to manage financial affairs. The level of knowledge of a person, especially generation Z related to financial affairs, will make life easier when making everyday financial decisions. In this process, financial literacy can play a significant role. Financial literacy can be defined as a person's ability to make informed assessments and make effective decisions about the use and management of money[4]. Financial literacy can also be Nova Adhitya Ananda² Depatment of Management Sumbawa University of Technology Sumbawa, Indonesia

understood as effectively understanding and managing financial resources for financial well-being[5]. From the above defines, it can be *understood that financial literacy* has a relationship *with financial behavior*.

The third National Financial Literacy Survey (SNLIK) conducted by Otoritas Jasa Keuangan (OJK) in 2019 showed the financial literacy index reached 38.03%, and the financial inclusion index 76.19%. These results provide information that people's financial literacy is still low. This low financial literacy indicates that Indonesians do not know financial institutions, financial products, and financial services. Previous research has found that financial literacy affects an individual's financial behavior. Individuals with good financial literacy can do things such as budgeting, savings, and expenditure control[7]; managing debt[8]; managing household finances, and amassing wealth[9]. From a business perspective, the more someone has good financial literacy, the more likely they are to grow their business[10]. In other words, people who have good financial literacy will make them wiser in their financial behavior.

Financial behavior shows how a person uses the money he or she has. In other words, financial behavior is part of financial literacy that is believed to contribute to the financial well-being of a person. Good financial behavior indicates that a person is aware of the information necessary to make financial decisions. Research conducted by [11] found that the better the financial literacy of generation Z, the better their financial behavior. This gives the sense that they are using their finances, not for consumptive things. The financial literacy of the individual will make the individual even more selective in making financial decisions[12]. Literacy shapes an individual's knowledge and expertise towards finance and shapes a financial attitude towards money, patterns of behavior, financial planning, and a person's ability to control their finances[13].

The financial attitude also influences financial behavior. Financial attitude is the evaluation of individual ideas, events, and objects related to personal financial problems[14]. An individual's financial attitude is a combination of individual personality characteristics and socioeconomic background to help achieve financial success[15]. Financial attitude is one of the factors behind individuals in performing financial-related actions or behaviors. A positive attitude can determine how an individual should perform the right actions against their

finances. Financial attitude has a positive and significant influence on financial behavior[16].

From the background above, researchers are interested in finding out if financial attitude and financial literacy affect financial behavior in generation Z in Sumbawa Subdistrict, Sumbawa Regency, West Nusa Tenggara Province, Indonesia.

II. LITERATURE REVIEW

A. Financial Literacy

Financial literacy is one's knowledge, skills, and competence in managing finance. Otoritas Jasa Keuangan (OJK) defines financial literacy as a series of processes or activities to improve consumers' and the public's knowledge, skills, and confidence to manage their finances well. Financial literacy is the ability to manage finances so that life can be more prosperous in the future[17]. Financial literacy is the knowledge possessed in finance, such as saving, investing that can influence the mindset in managing finance so that financial conditions are excellent and financial satisfaction is achieved[18].

Financial literacy can be measured through several indicators: basic knowledge of financial concepts, loans, savings and investments, and insurance. This study's financial literacy indicators are based on opinions [19] including basic knowledge of financial concepts, loans, savings and investments, and insurance. The indicator is chosen because it is considered following student conditions and has a role in improving student financial literacy.

B. Financial Attitude

Financial attitude is a mindset in responding to forms of fondness or dislike related to emotions (affective), trust (cognitive), and behavior (conative)[20]. That resulted in stimuli, such as borrowing habits and investment decisions. Financial attitudes can have important implications in financial knowledge[21]. A person's attitude towards money can be known by several indicators. There are four financial attitude indicators based on [22]. First, attitudes towards daily financial behavior that is related to the positive attitude of individuals in the use of good money for daily expenses. Second, the savings plan's attitude is related to the moneysaving plan's positive attitude, such as leaving money to save and sudden needs. Third, financial management attitude is a positive attitude to financial management, such as writing daily expenses, making financial records, planning budgets, and making budget priorities. Fourth, attitude towards future financial ability is related to a person's positive attitude to be responsible for decision-making that will impact the future.

C. Financial Behavior

Financial behavior is always related to the way individuals manage finances. Financial behavior is defined as behavior in managing personal finances, especially in his research, namely regulating the use of pocket money provided by parents more wisely[23]. Personal finance management is a process of achieving personal goals through structured and appropriate financial management[24]. Individuals must have the knowledge and skills to manage their personal financial resources for their well-being effectively. Financial behavior indicators to be used in this study are based on the opinions of the [25] and [26]. The indicator is first, on time in paying bills. Second, create a personal budget. Third, have savings for the future—fourth, compulsive purchase. The selection of indicators is chosen because it is considered to be representative and following student conditions and relevant to financial behavior variables.

D. Hyphotesis

In this study, there are three research hypotheses. namely the first hypothesis, there is an effect of financial literacy on financial attitude, the second hypothesis there is an effect of financial literacy on financial behavior and the third hypothesis there is an effect of financial attitude on financial behavior.

III. RESEARCH METHODS

A. Population and Samples

The population in this study was Generation Z in Sumbawa District. The sampling technique used purposive sampling with criteria, namely Gen-Z aged 20-25 years who live in the District of Sumbawa. Active use of the internet in the last three months. The number of samples used in this study was 200 respondents.

B. Data Analysis Techniques

This study's data analysis technique is to use Structural Equation Modeling (SEM) with Partial Least Square (PLS). The test steps are as follows [27]

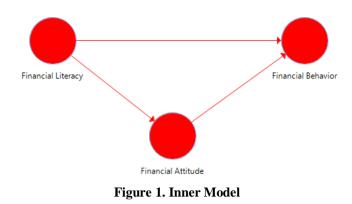
- 1. Designing Inner Model
- 2. Designing Outer Model
- 3. Model Evaluation
- 4. Hypothesis Testing

IV. RESULT AND ANALYSIS

The indicators used to explain the constructs in this study are reflective indicators. The results of the analysis are as follows.

A. Designing Inner Model

The development of a theory-based model or inner model, namely, development concept and theory-based models, analyzes relationships between exogenous and endogenous variables. This relationship is based on the research hypothesis. Theoretical model has been built, then will be drawn in flowcharts that serve to show the relationships between variables exogenous and endogenous.



B. Designing Outer Model

The design of the outer measurement model in PLS is essential because it is related to whether the indicator is reflexive or formative. In designing a theoretical model development, the thing to do is conducted a series of scientific explorations through a literature review to obtain justification for the theoretical model to be developed. SEM is used not to generate a model but to confirm the theoretical model through empirical data. Therefore Strong theoretical justification is the basis of model development.

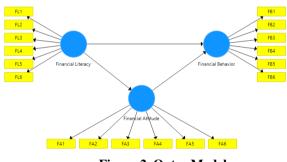
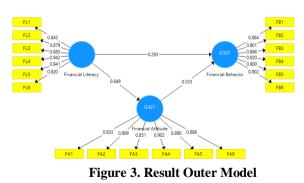


Figure 2. Outer Model

C. Model Evaluation

The outer model is an assessment of the reliability and validity of the research variables. The criterion for measuring a good reflective indicator is one that has a convergent validity correlation value of more than 0.70. However, the value of 0.5 to 0.6 can still be maintained for models that are still in the development stage [28].



The results of discriminate validity in the model can be

seen in the cross-loading values as follows:

Table 1. Cross Loading				
	Construct			
Indicator	Financial	Financial	Financial	
	Literacy	Attitude	Behavior	
FL1	0.843	0.639	0.589	
FL2	0.879	0.539	0.547	
FL3	0.883	0.597	0.619	
FL4	0.942	0.576	0.522	
FL5	0.941	0.570	0.504	
FL6	0.920	0.575	0.504	
FA1	0.492	0.833	0.573	
FA2	0.644	0.909	0.653	
FA3	0.587	0.851	0.649	
FA4	0.515	0.902	0.613	
FA5	0.631	0.890	0.617	
FA6	0.534	0.888	0.605	
FB1	0.651	0.659	0.884	
FB2	0.511	0.611	0.901	
FB3	0.525	0.635	0.886	
FB4	0.561	0.646	0.920	
FB5	0.500	0.599	0.900	
FB6	0.532	0.646	0.902	

Source : processed data, 2020

Based on table 1 above shows that the indicators FL1, FL2, FL3, FL4, FL5 and FL6 have a higher correlation to the construct of Financial Literacy (FL) than the correlation with the construct of Financial Attitude (FA) and Financial Behavior (FB). Likewise, the correlation of each other construct with the indicator is higher than the correlation of the indicator with other constructs.

Another method for assessing discriminant validity is by looking at the value of the average variance extracted (AVE). AVE value> 0.50 indicates that the construct in the study is valid [29].

Table 2. Average variance Extracted (AVE)					
Construct	AVE	Status AVE >			
		0.50			
Financial Literacy	0.814	Valid			
Financial Attitude	0.773	Valid			
Financial Behavior	0.808	Valid			
Source : processed data, 2020					

Table 2. Average Variance Extracted (AVE)

In addition to testing construct validity, construct reliability testing also needs to be done by looking at the composite reliability and Cronbach's alpha values. Data has good reliability if the composite reliability and Cronbach's alpha value is more than 0.70 [27]. The results are as follows:

Table 3. Reliability Test					
Construct	Cronbach	Composite	Status		
	Alpha	Reliability	> 0.70		
Financial Literacy	0.954	0.963	Valid		
Financial Attitude	0.941	0.953	Valid		
Financial	0.952	0.962	Valid		
Behavior					

Source : processed data, 2020

After evaluating the outer model, then evaluating the inner model. A structural model that has an R-Square value> 0.67 the model is declared good, the R-Square> 0.33 model is declared moderate, and an R-Square> 0.19 model is declared weak [27].

Table 4. R-Square					
Construct	R-Square	Status			
Financial Attitude	0.419	Valid			
Financial Behavior	0.533	Valid			
a	1.1	2			

Source : processed data, 202	Source	•	processed	data.	2020
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Relevance prediction (Q-Square) serves to validate the model. The Q-square predictive relevance result can be declared good if the value > 0 provides evidence that the model has predictive relevance, while the Q-Square value <0 indicates that the model has less predictive relevance. The magnitude of Q2 has a value with a range of 0 < Q2 < 1, where the closer to 1, the better the model.

From table 4 above can be calculated Q-square predictive relevance for this research model. The results are as follows:

$$\begin{array}{rcl} Q^2 & = & 1-(1\text{-}R1^2)~(1\text{-}R2^2) \\ & = & 1-(1\text{-}0.419)(1\text{-}0.533) \\ & = & 1-(0.581)(0.467) \\ & = & 1-0.271 \\ & = & 0.729~(72.9\%) \end{array}$$

D. Hypothesis Testing

The test statistic used is t statistic with t table value (5% significance) = 1.972. The research hypothesis is proven significant if the t statistical value is greater than 1.972. Here are the results

Construct	Original	Т	Status		
	Sample	Statistics	> 1.972		
Financial Literacy	0.649	14.016	Significant		
\rightarrow Financial					
Attitude (H1)					
Financial Attitude	0.529	7.879	Significant		
\rightarrow Financial			-		
Behavior (H2)					
Financial Literacy	0.265	3.309	Significant		
\rightarrow Financial			-		
Behavior (H3)					
Source : processed data 2020					

Table 5. Direct Effect

Source : processed data, 2020

From data table 5, it can conclusion that H1, H2, and H3 are accepted. In this study, apart from the direct effect, there is also an indirect effect. Sobel test uses to be able to determine the indirect effect. The result shows a value of 6,852> 1,972, meaning that the variable financial attitude is a variable that mediates the relationship between financial literacy and financial behavior.

E. Discussion

Increased knowledge that a person has can have an impact on active participation in financial-related activities, as well as more positive financial behavior for an individual. Someone with sound financial knowledge can plan and budget in managing their finances to determine sound financial decisions to achieve financial goals. Following this, it can be seen that someone with an adequate level of financial literacy can be applied in recording financial budgets, paying bills on time, and not experiencing waste. Thus, increasing financial literacy will also be followed by improvements in financial behavior. Previous studies have found the same thing as this study: financial literacy affects financial behavior[25]

Financial literacy also affects financial attitude in this study. This is in line with the results of research conducted by Santini. Someone who has good financial literacy will tend to have a positive attitude towards financial management, such as an attitude in daily use of money, a sense of responsibility for making decisions for the future related to finances.

Based on the test results, it is known that there is a positive effect of the financial attitude variable on the Z generation of financial behavior variables in the Sumbawa sub-district. This means that the better a person's attitude towards money, the better his financial management will be. Likewise, the descriptions of respondents' answers about Generation Z's financial attitude are in the high category. Their financial attitude will help determine their actions and behavior in financial matters, whether in terms of punctuality in paying bills, personal financial budgeting, or individual decisions regarding long-term savings.

Financial attitude is a state of mind, opinion, and a person's assessment of his finances, which are then applied to attitudes. A person's thoughts, opinions, and assessments of their personal financial situation will determine what kind of action they will take. For example, if someone has thoughts, judgments, and opinions, saving is not essential. Then that person will not save. If these thoughts, opinions, and judgments (attitudes) continue, it will become a habit/behavior that will be very difficult to change. This study's results are in line with research conducted by [30] with the results of the study that financial attitude influences financial behavior.

V. CONCLUSION

This study aims to analyze financial behavior in Generation Z. The data collected from 200 respondents who were between 20-25 years old. The results showed that financial attitude mediates the relationship between financial literacy and financial behavior.

In this study, the object studied was limited to Generation Z in Sumbawa District. Suggestions For further research to compare financial behavior in each generation.

REFERENCES

- W. Strauss and N. Howe, Generations: The History of America's Future, 1584 to 2069. New York: William Morrow & Co., 1992.
- [2]. BPS, *Statistik Kesejahteraan Rakyat 2019*. Jakarta: Badan Pusat Statistik, 2019.
- [3]. A. Kim, P. McInerney, T. R. Smith, and N. Yamakawa,

"Gen Zers in the Asia–Pacific region aren't like their older siblings. Here is what you need to know.," *McKinsey*, Jun. 29, 2020.

- [4]. G. Nicolini, *Financial Literacy in Europe: Assessment Methodologies and Evidence from European Countries.* New York: Routledge, 2019.
- [5]. F. D. O. Santini, W. J. Ladeira, F. M. B. Mette, and M. C. Ponchio, "The antecedents and consequences of financial literacy: a meta-analysis," *Int. J. Bank Mark.*, vol. 37, no. 6, pp. 1462–1479, 2019, doi: 10.1108/IJBM-10-2018-0281.
- [6]. Otoritas Jasa Keuangan, "Strategi Nasional Literasi Keuangan Indonesia 2019," 2019.
- [7]. V. G. Perry and M. D. Morris, "Who Is in Control? The Role of Self-Perception, Knowledge, and Income in Explaining Consumer Financial Behavior," *J. Consum. Aff.*, vol. 39, no. 2, pp. 299–313, 2005, doi: https://doi.org/10.1111/j.1745-6606.2005.00016.x.
- [8]. M. Brown and R. Graf, "Financial Literacy, Household Investment and Household Debt: Evidence from Switzerland," 2012.
- [9]. E. Bellet, "Empowering Women Financially–The Why and the How," *WealthTech B. FinTech Handb. Investors, Entrep. Financ. Visionaries*, pp. 194–196, 2012.
- [10]. J. Hussain, S. Salia, and A. Karim, "Is knowledge that powerful? Financial literacy and access to finance: An analysis of enterprises in the UK," *J. Small Bus. Enterp. Dev.*, vol. 25, no. 6, pp. 985–1003, Jan. 2018, doi: 10.1108/JSBED-01-2018-0021.
- [11]. J. Sustiyo, "Apakah literasi keuangan memengaruhi perilaku konsumsi generasi Z?," *Imanensi J. Ekon. Manajemen, dan Akunt. Islam*, vol. 5, no. 1, pp. 25–34, 2020, doi: https://doi.org/10.34202/imanensi.5.1.2020.25-34.
- [12]. N. Tang and A. Baker, "Self-esteem, financial knowledge and financial behavior," J. Econ. Psychol., vol. 54, pp. 164–176, 2016, doi: https://doi.org/10.1016/j.joep.2016.04.005.
- [13]. E. Nemeth and B. Zsoter, "Personality, Attitude and Behavioural Components of Financial Literacy: A Comparative Analysis," *J. Econ. Behav. Stud.*, vol. 9, no. 2, pp. 46–57, 2017.
- [14]. B. Marsh, "Examining the Personal Finance Attitudes, Behaviors, and Knowledge Levels of First-Year and Senior Students at Baptist Universities in the State of Texas," Bowling Green State University, 2006.
- [15]. J. Grable, "Financial Risk Tolerance and Additional Factors That Affect Risk Taking in Everyday Money Matters," J. Bus. Psychol., vol. 14, pp. 625–630, Jun. 2000, doi: 10.1023/A:1022994314982.
- [16]. Setiawati and A. Nurkhin, "Pengujian Dimensi Konstruk Literasi Keuangan Mahasiswa," *Econ. Educ. Anal. J.*, vol. 6, no. 3, pp. 727–736, 2018.

- [17]. H. Chen and R. P. Volpe, "An analysis of personal financial literacy among college students," *Financ. Serv. Rev.*, pp. 107–128, 1998.
- [18]. J. W. Chandra and G. Memarista, "Faktor-Faktor yang Mempengaruhi Financial Satisfaction pada Mahasiswa Universitas Kristen Petra," *Finesta*, vol. 3, no. 2, 2015.
 [19]. M. S. Mahapatra, S. Alok, and J. Raveendran,
- [19]. M. S. Mahapatra, S. Alok, and J. Raveendran, "Financial Literacy of Indian Youth: A Study on the Twin Cities of Hyderabad–Secunderabad," *IIM Kozhikode Soc. Manag. Rev.*, vol. 6, no. 2, pp. 132–147, 2017.
- [20]. R. S. Praba and K. Malarmathi, "Impact of Financial Situation on the Households Investment Decisions – A Study on Investment Decision Making Behaviour," *Int. J. Multidiscip. Res.*, vol. 1, no. 1, pp. 77–89, 2015.
- [21]. M. Ameliawati and R. Setiyani, "The Influence of Financial Attitude, Financial Socialization, and Financial Experience to Financial Management Behavior with Financial Literacy as the Mediation Variable," in *International Conference on Economics*, *Business and Economic Education 2018*, 2018, pp. 811– 832.
- [22]. Rajna and R. Anthony, "Knowledge, Attitude, Practice and Satisfaction on Personal Financial Management Among The Medical Practitioners In The Public and Private Medical Services in Malaysia," Universiti Kebangsaan Malaysia, 2011.
- [23]. N. T. Herawati, "Kontribusi Pembelajaran di Perguruan Tinggi dan Literasi Keuangan Terhadap Perilaku Keuangan Mahasiswa," J. Pendidik. dan Pengajaran, vol. 48, no. 1–3, 2015.
- [24]. M. Malinda, *Perencanaan Keuangan Pribadi*. Yogyakarta: Penerbit Andi, 2007.
- [25]. E. A. Selcuk, "Factors Influencing College Students' Financial Behaviors in Turkey: Evidence from a National Survey," *Int. J. Econ. Financ.*, vol. 7, no. 6, pp. 87–94, 2015.
- [26]. M. Gutter and Z. Copur, "Financial Behaviors and Financial Well-Being of College Students: Evidence from a National Survey," *J. Fam. Econ. Issues*, vol. 32, no. 4, pp. 699–714, 2011, doi: 10.1007/s10834-011-9255-2.
- [27]. I. Ghozali, *Structural Equation Modeling Metode Alternatif Dengan Partial Least Square (PLS)*. Semarang: Universitas Diponegoro, 2014.
- [28]. W. W. Chin, "The Partial Least Square Approach to Strutural Equation Modelling," *Mod. Methods Bus. Res.*, pp. 295–336, 1998.
- [29]. K. Gana and G. Broc, *Structural Equation Modeling with lavaan*. Hoboken: John Willey & Sons, Inc, 2019.
- [30]. I. Herdjiono and L. A. Damanik, "Pengaruh financial attitude, financial knowledge, parental income terhadap financial management behavior," *J. Manaj. Teor. dan Terap.*, vol. 9, 2016.