UNDERSTANDING FINANCIAL BEHAVIOR IN GENERATION Z

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ABSTRACT

As the demographic growth, the presence of Generation Z or Gen-Z reached 27.94 percent in 2020 so that it dominates the demographic structure in Indonesia after the millennial generation. Gen-Z grows along with the development of information technology to form a new lifestyle that is more open to using the internet and social media than previous generations. These conditions affect financial behavior, so it is necessary to conduct a study to determine the effect of financial knowledge, financial attitudes, and self-efficacy on financial behavior. A total of 100 respondents were selected to represent Generation Z. The sample selection technique used purposive sampling with the criteria of being born in 2000-2004, currently pursuing a bachelor's degree and domicile in Jakarta. Testing the validity, reliability and data processing of structural regression equations using Smart-PLS 4. The results show the coefficient values of financial knowledge (0.271), financial attitude (0.273) and self-efficacy (0.262) where the three have a significant positive effect on financial behavior at the 5 percent level. The results of the study serve as a reference for the government in revising policies to improve financial literacy and investment models for Generation Z. Advice for related parties such as banking, insurance, investment institutions, financial services authority, and others to respect with Gen-Z in achieving sustainability in their welfare. The formation of this behavior has an impact on responsible consumption for Gen-Z circles so that long-term commitment and implementation will also support the achievement of sustainable development goals in 2030 to realize sustainable prosperity for future generations.

Keywords: financial knowledge, financial attitude, self-efficacy, financial behavior, gen z.

1. INTRODUCTION

Technological growth is one of the factors that influence the character of a generation. The youngest generation in the category that has been productive in this century is Generation Z or known as Gen-Z with a lifestyle closely related to information technology or being more open to the internet than previous generations. This generation was born between 1997-2012 so they are proficient and adaptive to online activities. According to the Official Statistics News No.07/01/Th. XXIV in 2021 based on the 2020 Indonesian population census, Indonesia's population reached 270,200,000 people with the largest number being Gen-Z (BPS, 2021). This number reached 75,493,880 people (27.94 percent) so that it dominates Indonesia's demographic structure after the millennial generation. Currently, the age of this generation is in the range of 11-26 years or being the youngest group in the demographic structure. Gen-Z dominates demographics in Indonesia and globally, so it needs thinking so that their lifestyle and financial behavior are oriented towards sustainable prosperity.

Conceptually, the thinking above is in line with financial well-being which is defined as individuals or households who are sustainable in achieving their living needs comfortably, while having sufficient income and savings (Loo et al., 2023). Financial well-being is a person's belief or commitment to achieving financial security so that they do not feel any obstacles or constraints in meeting their financial needs. In line with this concept, it is hoped that it will occur in Generation Z where in the process of achieving these expectations, various factors such as financial stress, financial attitude, self-control and financial knowledge are influenced. Studies in Malaysia have proven that these factors affect

subjective financial well-being (Loo et al., 2023). In fact, mechanisms through financial knowledge can bridge the limitations of financial stress, financial attitude, and self-control in promoting financial well-being. Similar research proves that there is an influence of financial socialization agents and attitudes toward money on financial literacy mediated through financial self-efficacy and moderated by financial mindfulness in college students in Pakistan (Riaz et al., 2022). The study of Handayati et al., (2023) identified financial planning as the strongest indicator of financial self-efficacy, financial security as a shaper of financial attitudes while saved money is a benchmark in shaping financial well-being. Rahmah and Disman (2022), Kulkarni et al., (2022) emphasize a similar theme so that it is considered important to raise awareness of financial planning in generation Z.

Practically, the life of Generation Z is close to information technology so that it has the character of following new technology, is interactive with social media and with a lifestyle that tends to prioritize current desires rather than future needs. This is different from previous generations, so it is important to understand their character, attitude, and behavior in managing finances. This thinking triggers financial problems including YOLO (you only live once) as a lifestyle oriented to the present situation without worrying about future conditions. The YOLO principle is a view of enjoying life as you please because humans only live once (Maharani et al., 2022). In addition, FOMO (fear of missing out) represents worry about being left behind by other people's lifestyle trends so that they tend to appear ahead and up to date (Maharani et al., (2022). Both thoughts encourage the formation of consumptive behavior so that they are required to be more productive and have aligned financial behavior productivity. Converselly, this generation faces challenges in making financial decisions because they tend to have low income and limited assets, so they must understand financial management. In line with this situation, an approach is needed so that Generation Z is more responsible in managing their finances.

The data shows that easy access to technology triggers consumptive behavior such as online shopping, following trends and being easily attracted to new goods so that this behavior becomes the target market for business owners. Referring to Dimas Bayu (2022), a survey by the Association of Indonesian Internet Service Providers in 2022 stated that internet penetration reached 77.02 percent, with the largest being in the 13–34-year age group. The survey also shows that online shopping is 21.26 percent. Financial knowledge, financial attitude, and financial behavior are needed to manage finances wisely. The National Survey of Financial Literacy and Financial Inclusion (SNLIK, 2022) states that the financial literacy index of the Indonesian people is 49.68 percent, an increase of 38.03 percent compared to 2019. Meanwhile the level of financial inclusion is 85.10 percent or an increase of 76.19 percent. Even though the gap between literacy levels and inclusion has decreased, the achievement of this figure still needs to be improved. Based on these considerations, it is deemed necessary to conduct research on the determinants of financial behavior in Gen-Z.

This aspect is compatible with the achievement of sustainable development goals (SDGs), including SDGs-12 concerning responsible consumption and production. It is necessary to base consumption patterns in a responsible manner. Attention to financial literacy from both the private and public sectors is needed to encourage more sustainable individual consumer behavior (Muñoz-Céspedes et al., 2021). As future generations, their welfare must be protected and fulfilled so that potential problems in that generation can be overcome. This is in line with the intention of sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The target of sustainable development is the welfare of future generations where Generation

Z is part of that generation. Decision makers must respect the welfare of future generations so that the development of information technology is not one of the factors that interfere with the welfare of future generations. The breakthrough is to realize this hope through the behavior of managing finances wisely to avoid consumptive behavior. This mechanism affects financial ability and forms more sustainable financial satisfaction (Patricia and Nuringsih, 2022).

Based on good financial behavior, a person tends to control and make a spending plan so that he can avoid consumptive behavior. In line with Norisnita and Indriati (2022), the test refers to the theory of planned behavior (TPB) to predict individual behavior in making rational decisions, as well as social-cognitive theory to explain the effect of self-efficacy on human behavior (Abdullah, 2019). Tiwari and Yadav (2022) identify the link between financial literacy and financial behavior, so that financial knowledge is placed as a fundamental factor so that a person could manage finances and forms financial behavior. Financial attitudes are related to positive or negative assessments of financial decisions such as budgeting, investment management and others so that they have a significant effect on financial behavior (Patricia and Nuringsih, 2022). In line with TPB, self-efficacy is placed as a proxy for perceived behavioral control (Norisnita and Indriati, 2022). Financial management selfefficacy is a person's belief that he can achieve goals (Hu et al., 2021) so that it influences financial behavior. In forming responsible financial behavior, Generation Z needs to have financial knowledge to form attitudes and self-efficacy towards financial management. The orientation of this approach creates sustainable prosperity for future generations. In line with the problems related to the financial behavior of Generation Z, the formulation of the problem is: Do financial knowledge, financial attitudes and self-efficacy have a positive effect on financial behavior in Generation Z?

The goal of the study provides some suggestions for stakeholders such as banking, insurance, investment institutions, financial services authorities, and others to respect with Gen-Z in achieving sustainability in their welfare. Supervision and strict action on illegal investment networks such as cooperatives or investment trading is needed so as not to harm the interests of the younger generations and previous generations. In line with the achievement of the SDGs in 2030, the interests of future generations are targets that must be solved together. The YOLO and FOMO lifestyles need to be accompanied by knowledge of managing finances so that they have positive thoughts about investing and are careful in their consumption. This hope is in line with efforts to realize SDGs-12 to build responsible consumption behavior in Gen-Z. This result serves as a reference for the government in revising policies to improve welfare for the future generations. This is as stage in understanding financial behavior on Gen-Z.

2. LITERATURE REVIEW

Social Cognitive Theory

Social Cognitive Theory developed by Albert Bandura that individual learning occurs in a social environment. This theory explains that self-efficacy is the basis for building and shaping individual behavior or as a condition for changing individual behavior. These beliefs influence individual choices, experiences and prioritize opportunities to control their lives with wise financial behavior. In line with TPB, through social-cognitive theory explains the effect of self-efficacy on human behavior (Abdullah, 2019).

Theory of Planned Behavior

Theory of Planned Behavior (TPB) was developed by Ajzen as a development of the theory of reasoned action. This theory assumes that individual behavior is not only controlled by himself but also controlled by the availability of certain resources and opportunities. In this theory, control beliefs and behavioral beliefs are the basis for building and shaping individual behavior. TPB predicts individual behavior in making rational decisions. TPB states that individual behavior is influenced by intention (Norisnita and Indriati, 2022), while the formation of intention is determined by attitude, subjective norms, and perceived behavior control.

Financial Behavior

Saurabh and Nandan (2018) defined financial behavior as the ability of individuals to manage their finances to be successful in life. The ability to manage finances such as planning, budgeting, managing, checking, controlling, searching, and storing the amount of money they have for use in daily needs. Financial behavior as a form of financial responsibility relates to making financial decisions so that it has an important role in ensuring the financial security of an individual. With a stable financial condition, an individual could overcome future financial problems and will have a positive impact, such as saving costs when shopping to avoid a consumptive lifestyle. Many factors influence financial behavior such as financial knowledge, financial attitude, and financial self-efficacy (Saurabh and Nandan (2018); Potrich et al., 2016); Sam et al., (2022); Patricia and Nuringsih (2022).

Financial Knowledge

According to Sam et al., (2022), financial knowledge is a person's understanding of financial terms and their impact on financial well-being for that person including financial planning, budgeting, inflation, opportunity costs, interest rates, exchange rates and awareness of financial market products. Potrich et al., (2016), financial knowledge is a particular type of capital acquired in life through learning the ability to manage income, expenditure, and savings safely. Financial knowledge as a basis for understanding financial management such as money management, investment, and credit to form wise financial behavior. Sam et al., (2022) stated that financial knowledge has a significant positive relationship with financial behavior. Wiyanto et al., (2019) stated that limited financial knowledge has an impact on poor financial planning so that this knowledge is a basic need for an individual to avoid financial problems. Nyoto et al., (2021); Patricia and Nuringsih (2022) did not prove a significant effect of financial knowledge on financial behavior, whereas Pamikatsih et al., (2022), Adiputra et al., (2021) produced a significant effect on financial behavior. In accordance with Generation Z, the formulation of first hypothesis is:

Ha1: Financial knowledge has a positive effect on financial behavior in Generation Z

Financial Attitude

In line with Potrich et al., (2016) financial attitude is a combination of concepts, information, and emotions that results in a readiness to react favorably. Financial attitude is an individual's response to the financial conditions they experience or the embodiment of the application of financial principles to maintain value through decision making and proper management of resources. Sam et al., 2022), revealed that financial attitudes have a significant positive relationship with financial behavior. Adiputra et al., (2021), Patricia & Nuringsih (2022)

prove a significant influence on financial behavior in Jakarta. In contrast, Nisa and Haryono (2022) did not prove the significant effect of financial attitude on financial management behavior in Surabaya. In accordance with Generation Z, the formulation of the second hypothesis is:

Ha2: Financial attitudes have a positive effect on financial behavior in Generation Z

Self-Efficacy

Self-efficacy is an individual's belief in achieving success in a task so that with this belief becomes optimism and confidence can overcome various life challenges (Bandura, 1977; 2006). Individuals with a high level of self-efficacy have confidence that they can carry out their duties properly. Abdullah (2019) stated the social-cognitive theory explains the mechanism of the impact of self-efficacy on human behavior. Self-efficacy in the context of financial management is the level of one's confidence in one's ability to access, use financial products or services, make financial decisions, and deal with complex situations related to finance (Noor et al., 2020). Anastasia and Lestaritio (2020) self-efficacy in the financial context are defined as a person's belief in achieving financial goals with his behavior when choosing financial products. Having self-efficacy shows self-confidence so that you can make financial decisions according to your financial goals. As an alignment with TPB, the involvement of self-efficacy in this research model replaces perceived behavior control (Norisnita and Indriati, 2022) which has an important role in shaping financial behavior. In accordance with Gen-Z, the formulation of the 3rd hypothesis is:

Ha3: Self-efficacy have a positive effect on financial behavior in Generation Z

3. RESEARCH METHOD

The stages of conducting the research are as follows: First, the research design uses a descriptive and quantitative approach with data processing using a statistical or multivariate approach. This study examines the effect of independent variables consisting of financial knowledge, financial attitudes, and efficacy on financial behavior as the dependent variable.

Second, the research population focuses on Generation Z in Jakarta with purposive sampling as a sampling technique. The sample criteria are as follows: (1) students currently studying for their bachelor's degree, (2) born in 2000-2004, and (3) domiciled in Jakarta. The consideration for choosing this age range is related to their age of maturity and having an adequate educational background related to personal financial management so that they are assumed to be responsible for using their money.

Third, variable measurement refers to previous studies with a total of 14 indicators, including financial behavior (PL) (Ramalho and Forte, 2019; Potrich et al., 2016), financial knowledge (PK) (Saurabh and Nandan, 2018); Ramalho and Forte, 2019), financial attitude (SK) (Ramalho and Forte, 2019), and self-efficacy (ED) (Anastasia and Lestaritio, 2020). The indicators were developed into a questionnaire with an interval scale between 1 (strongly disagree) to 5 (strongly agree). The determination of the scale is to make it easier for respondents to determine their options so that there is no ambiguity in determining their opinion. Distribution of questionnaires via google forms.

Fourth, testing the outer model includes validity and reliability (Hair et al., 2017). Validity testing includes convergent validity and discriminant validity. Convergent validity examines whether all variables in a construct are associated only with that variable. Using the basis of

Average Variance Extracted (AVE) with a criterion value above or equal to 0.50 (Hair et al., 2017). Discriminant validity is tested through cross loadings where the loading value on an indicator of a variable is greater than the value of another variable indicator (Hair et al., (2017). Reliability testing uses Cronbach's Alpha and Composite Reliability with criteria that must be greater than 0.60 to meet the criteria of being reliable.

Fifth, hypothesis testing using structural equations based on multiple regression refers to the t test at a significance level of 5 percent. The hypothesis is accepted if it produces a p-value smaller than 0.05 or a t-count greater than 1.96. Regression data processing and validity and reliability testing use SmartPLS 4 software.

4. RESULTS AND DISCUSSIONS

Respondents' Profile

The study involved 100 Generation Z respondents born between 2000-2004. The entire profile is summarized in Table 1. The largest number of respondents was 21 years old (48 percent) then 22 years old (27 percent) and 20 years old (14 percent). As many as 62 percent have not worked or received pocket money from their family, while 38 percent work parttime or full-time. Most of the respondents (46 percent) had an average income of between IDR 3,000,000.- to 4,000,000.- while 65 percent of respondents had an average expenditure of IDR 2,000,001.- to 3,000,000,-.

Table 1. Respondents' Profile

Profile	Information	Percentage
Year of Birth	2000 (22 y.o)	27
	2001 (21 y.o)	48
	2002 (20 y.o)	14
	2003 (19 y.o)	8
	2004 (18 y.o)	3
Source of Income	From Family / Parent	62
	Work in Part-Time / Full-Time	38
Average Income per Month	< IDR 2,000,000	6
	IDR 2,000,000 – 3,000,000	24
	IDR 3,000,001–4,000,000	46
	IDR 4,000,001 –5,000,000	20
	> IDR 5,000,000	4
Average Spending per Month	< Rp. 2.000.000	27
	IDR 2,000,000 – 3,000,000	65
	IDR 3,000,001–4,000,000	7
	IDR 4,000,001 –5,000,000	1

Source: Processed by the Authors

The Result of Validity and Reliability Testing

Table 2 shows the cross-loading value above 0.60 illustrates that the loading indicator value of a variable is greater than the loading value of another variable indicator. Reinforced in Figure 1 with a loading factor value greater than 0.70 so that it meets the validity criteria.

Table 2. Cross Loadings Test Results

Indicator	PK	SK	ED	PL
PK1	0.917	0.476	0.535	0.505
PK2	0.917	0.569	0.530	0.507
PK3	0.934	0.479	0.597	0.526
PK4	0.845	0.295	0.604	0.529
SK1	0.408	0.866	0.340	0.448
SK2	0.453	0.943	0.443	0.539
SK3	0.512	0.940	0.504	0.514
SK4	0.459	0.903	0.394	0.424
ED1	0.617	0.476	0.926	0.560
ED2	0.617	0.462	0.936	0.525
ED3	0.519	0.360	0.910	0.487
ED4	0.477	0.343	0.796	0.410
PL1	0.430	0.351	0.309	0.831
PL2	0.473	0.446	0.424	0.856
PL3	0.633	0.546	0.649	0.881
PL4	0.384	0.445	0.463	0.889

Note: PK: Financial Knowledge; SK: Financial Attitude; ED: Self-Efficacy; PL: Behavioral Finance

Source: SmartPLS 4 Data Processing Results

Moreover, the results of the outer loadings in Figure 1 indicate that the loading factor value is greater than 0.70 so that it meets the validity criteria. The loading factor score on the bootstrapping results fit in the cross-loading value so that it can be stated that the 14 indicators are valid in measuring these four variables.

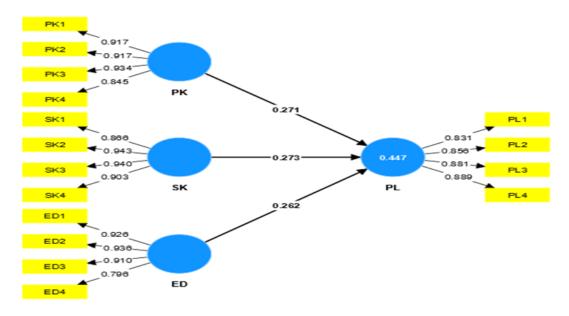


Figure 1. Bootstrapping Test Source: SmartPLS 4 Data Processing Results

Table 3 shows the AVE value is greater than 0.50 so that all indicators are declared valid. The value of Cronbach's Alpha and Composite Reliability is greater than 0.60 so that it can be concluded that all indicators are declared reliable in measuring financial knowledge, financial attitudes, self-efficacy, and financial behavior.

Table 3. AVE Scores and Reliability Test Results

Variable	AVE	Cronbach's Alpha	Composite Reliability
Financial Knowledge	0.817	0.925	0.925
Financial Attitudes	0.834	0.934	0.943
Self-Efficacy	0.799	0.915	0.929
Financial Behavior	0.747	0.889	0.923

Source: SmartPLS 4 Data Processing Results

Hypothesis Testing

R-square of 0.447 indicates financial knowledge, financial attitude, self-efficacy contributes to financial behavior of 44.70 percent while the rest (55.30 percent) is influenced by other variables. The value of the effect size (f square) is in a low category such as: financial knowledge (0.073), financial attitude (0.096), and self-efficacy (0.072) so that all three have a weak influence on financial behavior in Generation Z.

Table 4 describes the results of structural regression testing with path coefficients on financial knowledge (+0.271), financial attitudes (+0.273), and self-efficacy (+0.262). Regression testing shows a significant effect at the 5 percent level on financial knowledge on financial behavior. The resulting t-statistics value is 2.126 or higher than 1.96 and the resulting p-value is 0.034 or less than 0.05 so that the first hypothesis (Ha1) is accepted with a significance of 5 percent. Testing the second hypothesis shows a significant influence on financial attitudes towards financial behavior. The resulting t-statistics value is 2.393 or higher than 1.96 and the resulting p-value is 0.017 or less than 0.05 so that the second hypothesis (Ha2) is accepted with a significance of 5 percent.

Table 4. Path Coefficients Test Results

Path	Original Sample	T-Statistics	P-Values	
Financial Knowledge →	0.271	2.126	0.034	
Financial Behavior	0.271	2.120	0.034	
Financial Attitudes →	0.273	2.393	0.017	
Financial Behavior	0.273	2.393	0.017	
Self-Efficacy → Financial Behavior	0.262	2.350	0.019	

Source: SmartPLS 4 Data Processing Results

Testing the third hypothesis shows a significant effect on self-efficacy on financial behavior. The resulting t-statistic value is 2.262 or higher than 1.96 and the resulting p-value is 0.019 or less than 0.05 so that the third hypothesis (Ha3) is accepted with a significance of 5 percent. Three hypothesis tests can be declared accepted at a significance level of 5 percent. Discussion of the results are discussed as follows.

Discussion

These results are according to the studies of Sam et al., (2022), Pamikatsih et al., (2022), Adiputra et al., (2021), Wiyanto et al., (2019) that the effect of positive financial knowledge

is significant on financial behavior. In a direction according to Nyoto et al., (2021); Patricia and Nuringsih (2022) although the results are not significant. Financial knowledge increases the ability to plan finances to avoid financial problems. In line with the development of information technology and its ease of access, the life of Generation Z has an interactive character with social media, so it needs to be based on knowledge of financial management.

The effect of financial attitudes on financial behavior according to studies (Sam et al., 2022), Adiputra et al., (2021), Patricia & Nuringsih (2022). Having an attitude helps determine the actions of managing finances, making short-term and long-term investment decisions or personal financial budgeting. Increasingly having a positive assessment shows one's attitude towards their finances so that Gen-Z must have this attitude to be able to determine actions and behaviors correctly so as not to face financial problems in the future.

The effect of self-efficacy on financial behavior is in accordance with the studies of Noor et al., (2020), Anastasia and Lestaritio (2020). Self-efficacy is a form of one's self-confidence when making financial decisions so Gen-Z must have confidence in making financial decisions.

Alignment with TPB through financial knowledge and financial attitudes can foster intentions to shape financial behavior. Likewise, according to social learning theory, self-efficacy fosters self-confidence so that it shapes financial behavior. This mechanism can suppress the orientation of current interests or "you only live once" (YOLO) and the desire to follow the latest trends among the community or "fear of missing out" (FOMO). Even though not all Gen-Z do this lifestyle, both represent a consumptive lifestyle, so they are expected to have financial behavior in line with their productivity. Financial literacy as an approach so that Generation Z is more aware of making financial decisions.

It is relevant to TPB that by being given sufficient literacy, Gen-Z will have basic knowledge relevant to managing their income or money ownership and forming a positive attitude in using their money. This literacy and knowledge fosters self-confidence in making financial decisions so that they can withstand the potential for YOLO and FOMO among Gen-Z. The formation of self-confidence will be related to perceived behavior control to foster the intention to manage finances among Gen-Z.

The government with related parties must facilitate the primary needs of this generation. For example, representative housing or apartments are needed between price and location according to the capabilities of the majority of Gen-Z, so that their income can be spent responsibly to support their living needs. Other related programs can be carried out with the private sector to direct a consumptive lifestyle into a responsible consumption pattern. This is an effort to understand the interests and financial behavior of Generation Z.

5. CONCLUSIONS AND SUGGESTIONS

Research proves the influence of financial knowledge, financial attitudes and self-efficacy is positively significant on the financial behavior of Generation Z in Jakarta with a significance level of 5 percent. The results of the study serve as a reference for the government in revising policies to increase financial knowledge for Generation Z. Advice for related parties such as banking, insurance, investment institutions, financial services authorities, and others to respect with Gen-Z in achieving sustainability in their welfare. Supervision and strict action against illegal investment networks that harm the interests of the young generations.

Suggestions for further research are to develop a model on financial well-being with a larger scale of respondents. It is hoped that Gen-Z individuals will continue to explore knowledge and seek literacy related to financial management so that they can strengthen their attitude and confidence in making financial decisions.

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REFERENCES

- Abdullah, S.M. (2019). Social Cognitive Theory: A Bandura thought review published in 1982-2012, *Journal Psikodimensia* Vol. 18, No. 1, 85-100. DOI: 10.24167/psidim.v18i1. 1708
- Adiputra, I., Suprastha, N., and Tania, L. (2021). The influence of financial knowledge, financial attitude dan locus of control on financial behavior of E-Wallet users in Jakarta. *Journal of Contemporary Issues in Business and Government*, 27(1), 3318-3332.
- Anastasia, N., and Lestaritio, M.J. (2020). The effect of women's financial self-efficacy on financial product ownership. *Journal of Economics, Business, and Accountancy Ventura*, 23(2), 169-182. 10.14414/jebav. v23i2.2285
- Badan Pusat Statistik. (2021). Retrieved from Hasil Sensus Penduduk 2020: https://www.bps.go.id/pressrelease/2021/01/21/1854/hasil-sensus-penduduk-2020.html
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164–180., 1(2), 164–180.
- Dimas Bayu (2022). https://dataindonesia.id/digital/detail/apjii-pengguna-internet-indonesia-tembus-210-juta-pada-2022, diakses 22 Maret 2023.
- Handayati, P., Restuningdyah, N., Ratnawati., and Meldona. (2023). Confirmatory Factor Analysis of Self-efficacy and Financial Attitudes to Improve the Financial Well-Being of MSMEs. In B. Mabaroh et al. (Eds.), ICLESS 2022, ASSEHR 685, 280–287. https://doi.org/10.2991/978-2-494069-15-2_30
- Hair, J. F., Sarstedt, M., and Ringle, C. M., (2017). *Partial Least Squares Structural Equation Modeling*. Handbook of Market Research, 1-40. https://doi.org/10.1007/978-3-319-05542-8_15-1
- Hu, J., Quan, L., Wu, Y., Zhu, J., Deng, M., Tang, S., and Zhang, W. (2021). Financial self-efficacy and general life satisfaction: The sequential mediating role of high standards tendency and investment satisfaction. *Journal Frontiers in Psychology*, 12, 1-9. https://doi.org/10.3389/fpsyg.2021.545508

- Kulkarni, N., Risbud, M., and Gautam, O. (2022). A study of the awareness of the financial planning and implementation amongst generation z. *Journal of Positive School Psychology*, Vol. 6, No. 6, 2420-2427. http://journalppw.com
- Loo, M.W., Kuah, Y.C., and Liew, F.M. (2023). Factors affecting subjective financial well-being of emerging adults in Malaysia. In F. Chen et al. (Eds.), *BAFE 2022*, *AEBMR 671*, 132–148, 2023. https://doi.org/10.2991/978-2-494069-99-2_11
- Maharani, Y., Salsabilla, S., Putra, A.F., Ayuntari, C.G., and Marfuah. (2022). Literasi investasi berbasis aplikasi smartphone bagi generasi z. *Rahmatan Lil'alamin Journal of Community Services*, 2 (1), 30-37. https://doi.org/10.20885/RLA.Vol2.iss1.art4
- Muñoz-Céspedes, E., Ibar-Alonso, R., and de Lorenzo Ros, S. (2021). Financial literacy and sustainable consumer behavior. *Sustainability*, 13, 9145. DOI: http://dx.doi.org/10. 3390/su13169145
- Nisa, F.K., and Haryono, N.A. (2022). Pengaruh financial knowledge, financial attitude, financial self efficacy, income, locus of control, dan lifestyle terhadap financial management behavior generasi z. *Jurnal Ilmu Manajemen*, 10(1), 82-97.
- Noor, N., Batool, I., and Arshad, H.M. (2020). Financial literacy, financial self-efficacy & financial account ownership behavior in Pakistan. *Cogent Economics & Finance*, 8(1). doi: https://doi.org/10.1080/23322039.2020.1806479
- Norisnita, M., and Indriati, F. (2022). Application of Theory of Planned Behavior (TPB) in cryptocurrency investment prediction: a literature review. *Economics and Business Quarterly Reviews*, 5(2), 181-188. DOI: 10.31014/aior.1992.05.02.424
- Nyoto., Renaldo, N., Karuppannan, G., and Bhuiyan, A.B. (2021). The determinance of the financial behavior among graduate students in Indonesia. *Australian Finance & Banking Review* Vol. 5, No. 1, 15-28.
- Pamikatsih, T.R. et al., (2022). The influencing factors for financial behavior of gen z. In *Proceeding 2nd International Conference on Business & Social Sciences (ICOBUSS)*, 440-449. https://ojsicobuss.stiesia.ac.id/index.php/icobuss1st/article/view/196
- Patricia, V., and Nuringsih, K. (2022). The role of financial behavior in shaping the sustainability of financial satisfaction among millennials in Jakarta. In Proceeding the *Tenth International Conference on Entrepreneurship and Business Management 2021* (*ICEBM 2021*), 412-418. https://www.atlantis-press.com/proceedings/icebm-21/125974189
- Potrich, A.C.G., Vieira, K.M., and Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. *Management Research Review*, *39*(3), 356–376. https://doi.org/10.1108/ MMR-06-2014 -0143
- Rahmah, R., and Disman, D. (2022). The effect of financial behavior on investment decisions in the millennial generation group. In Proceeding 4th Social and Humanities Research Symposium (SoRes 2021), 525-528. https://www.atlantis-press.com/proceedings/sores-21/125973410

- Ramalho, T.B., and Forte, D. (2019). Financial literacy in Brazil—do knowledge and self-confidence relate with behavior? *RAUSP Management Journal*, Vol. 54 No. 1, 77-95. https://doi.org/10.1108/RAUSP-04-2018-0008
- Riaz, S. et al., (2022). Influence of financial social agents and attitude toward money on financial literacy: The mediating role of financial self-efficacy and moderating role of mindfulness. *SAGE Open*, July-September 1–16. DOI: 10.1177/21582440221117140
- Sam, P.A., Frimpong, S. and Kendie, S. (2022). Personal finance behaviour: a reasoned action approach. *International Journal of Social Economics*, Vol. 49 No. 8, 1119-1131. https://doi.org/10.1108/IJSE-02-2021-0097
- Saurabh, K., and Nandan, T. (2018). Role of financial risk attitude and financial behavior as mediators in financial satisfaction. *South Asian Journal of Business Studies*, 7(2), 207–224. DOI: 10.1108/sajbs-07-2017-0088
- SNLIK (2022). https://ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Survei-Nasional-Literasi-dan-Inklusi-Keuangan-Tahun-2022.aspx
- Tiwari, A., and Yadav, A. (2022). A study of financial literacy and financial behaviour among millennials and generation z. Journal of The Asiatic Society of Mumbai, Vol. XCV, No.21, 1-8. DOI: 10.5281/zenodo.7251292
- Wiyanto, H., Putri, Y. I., and Budiono, H. (2019). Keterkaitan pengetahuan dan perencanaan keuangan terhadap perilaku karyawan pria. *Jurnal Ekonomi, 14*(2), 176-192. DOI: http://dx.doi.org/10.24912/je.v24i2.567
- Yadav, C. S., Rana, M, A., and Mishra, A. K. (2021). Financial literacy and its impact on financial inclusion in decision making: A bibliometric analysis. *Elementary Education Online*, Vol 20, Issue 3, 3647-3666. http://ilkogretim-online.org DOI: 10.17051/ ilkonline.2021.03.383