E-ISSN : 2549-3280 P-ISSN : 2549-5933
INTEGRATED JOURNAL OF BUSINESS AND ECONOMICS
Email: ijbe.feubb@gmail.com
Laman: http://ojs.ijbe-research.com/index.php/IJBE/index

Financial Knowledge, Internal Control Locus, and Personal Money-Related Behavior: A Survey on Undergraduate Accounting Students

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Abstract

This research intends to examine the impact of financial knowledge and internal control locus on student behavior to manage money and the effect of internal control locus on this knowledge. The students becoming the population are from the active undergraduate accounting department in Maranatha Christian University, distributed into six batches: 2015 to 2020; the number is 413. Considering this feature, we use the stratified random sampling method, setting the batches as the strata. After surveying the 200 students as the samples, the number of responded students is 193; hence, the participation level is 96.50%. Based on this situation, we use the structural equation model based on covariance after the validity and reliability tests are met. To sum up, this research unveils that money-related understanding does not affect student behavior. On the other hand, the internal control locus positively affects personal money-related behavior and financial knowledge.

Article Info

- **Received** : 12th April, 2021
- **Revised** : 29th June, 2022
- **Published** : 30th June, 2022
- **Pages** : 172-184
- **DOI** : 10.33019/ijbe.v6i2.360
- **JEL** : G53, I22
- **Keywords** : *Financial Knowledge, Internal Control Locus, Undergraduate Accounting Students, Personal Money-Related Behavior*

1. Introduction

Numerous frauds happen in society. Usually, fraudsters offer investments with unbelievable gains. After getting money, they leave their victims without news (Widowati & Winarto, 2017). Another fraud is the unknown message on a cellphone or WhatsApp informing the prize with a fantastic amount and expensive goods on the unofficial website. As a website requirement, the fraudsters require that the victim candidate transfer the money to their banking account. Then, they promise to return the funds plus the prize amount to the candidate's banking account or send the promised goods to the candidate's address (Wardhani, 2020).

As part of society, students in higher education must financially behave. They have to be responsible for their life separated from their family. Consequently, they must allocate the funds from his parents based on three aspects, i.e., budgeting funds, saving cash, and paying bills (Akben-Selcuk, 2015). Additionally, to make the students behave financially well, the lecturers need to know the affecting factors. According to Cude et al. (2006), the related reason is their academic performance. The students without good financial behavior will get stressed and cannot concentrate on learning the subjects in the class.

Associated with financial behavior, many previous scholars have tried to prove its connection to financial knowledge (Perry & Morris, 2005; Grable et al., 2009; Ida & Dwinta, 2010; Robb & Woodyard, 2011; Akben-Selcuk, 2015; Mien & Thao, 2015**;** Aghababaei & Khademi, 2019; Arifin et al., 2019; Bapat, 2020; Pathirannahalage & Abeyrathna, 2020; Zulfaris et al., 2020). On the other hand, their results still vary. These situations are shown by the studies showing a positive impact of financial knowledge on behavior (Grable et al., 2009; Mien & Thao, 2015; Aghababaei & Khademi, 2019; Bapat, 2020; Pathirannahalage & Abeyrathna, 2020; Zulfaris et al., 2020), the study displaying no influence (Perry & Morris, 2005).

Broadly, the numerous preceding studies are also conducted to prove another determinant of financial behavior, i.e., control locus, either internally (Pinjisakikool, 2017; Arifin, Anastasia, Siswanto, & Henny, 2019; Bapat, 2020) or externally (Perry & Morris, 2005; Grable, Park, & Joo, 2009; Ida & Dwinta, 2010; Britt, Cumbie, & Bell, 2013; Mien & Thao, 2015; Pathirannahalage & Abeyrathna, 2020). However, their results are still different; for instance, Pinjisakikool (2017), Arifin et al. (2019), and Bapat (2020) confirm a positive impact. However, Perry & Morris (2005), Britt et al. (2013), Mien & Thao (2015), and Pathirannahalage & Abeyrathna (2020) negatively affirm this effect. Meanwhile, Grable et al. (2009) and Ida and Dwinta (2010) fail to discover the influence. Besides, the effect of internal control locus on financial knowledge is infrequently proved. Based on our observation, we find only one scholar, Susanti (2016), investigating this relationship.

The research gap between two determinants of financial behavior and the infrequent finding on the impact of internal control locus on financial knowledge inspire this study. This study can become the basis for the undergraduate accounting department at Maranatha Christian University for appearing the subject of personal financial management in the curriculum.

2. Literature Review

Control Locus

Control locus is one of the psychological topics associated with what people trust. Based on whom they trust, this locus has two types: external and internal. People with high external control locus tend to count on the power outside, such as good fortune, available opportunities, and other influential persons in their life. Contrariwise, people with high internal control locus believe success will depend on their current efforts (Perry & Morris, 2005).

Financial Knowledge

Through financial knowledge, people will know how to plan and understand the benefits of saving, borrowing, owning insurance to anticipate future things, and investing to increase their wealth. Preferably, if they deeply recognize this information, they will responsibly use their money (Akben-Selcuk, 2015).

The relationship between financial knowledge and personal money-related behavior

In their investigation of the Koreans living in the United States, Grable et al. (2009) support these explanations by depicting the more financially informative, the more excellent people manage their money. Also, Ida & Dwinta (2010) locate similar evidence after surveying the Maranatha Christian University students. The same result comes from Rob & Woodyard (2011). Their study displays a positive relationship between financial knowledge and behavior based on the best practice by employing the National Financial Capability Study data belonging to the Financial Industry Regulatory Authority in the United States. Also, Mien & Thao (2015) confirms this positive association when investigating young adults in Vietnam. Akben-Selcuk (2015) utilizes the logistic regression model to analyze the data by employing the students as the samples. After that, she points out that students with high financial knowledge tend to have a higher probability of budgeting funds, saving money, and paying the bills on time.

Furthermore, this positive propensity of financial knowledge on behavior is also confirmed by Aghababaei & Khademi (2019) after inspecting the Iranian youth. Equally, this fact is also sustained by Bapat (2020) once researching the young adults aged 18 to 35 in India. In their research on the employees receiving a fixed salary in Indonesia, Arifin et al. (2019) express the same evidence. Pathirannahalage & Abeyrathna (2020) confirm this proof once learning about civil servant behavior in Sri Lanka. Besides, Zulfaris et al. (2020) successfully prove this tendency when researching Malaysia's public university students. Based on these facts, the second hypothesis is expressed like this:

H_1: The person knowing more about finance will financially behave well.

The relationship between internal control locus and personal money-related behavior

Related to money behavior, Perry & Morris (2005) confirm that the customers with high external control locus tend to behave less financially. Additionally, Britt et al. (2013) support their study result by inferring that students owning this high control locus will possess the most horrible financial behavior. In line with them, Mien & Thao (2015) successfully prove this tendency by utilizing the young adult Vietnamese aged 19 to 30 as the samples. Correspondingly, Pathirannahalage & Abeyrathna (2020) find a negative relationship between external control locus and financial behavior after investigating the civil servants in Sri Lanka.

On the contrary, when investigating two-locus households in the Netherlands, Pinjisakikool (2017) reveals that the internal locus positively affects financial behavior, but the external locus does not. Similarly, by researching the employees with fixed income as their samples in Indonesia, Arifin et al. (2019) summarize that the persons with high internal control locus tend to manage their money well. Studying the respondents' young adults aged 18 until 35 in India, Bapat (2020) infers that individuals with a high internal control locus are inclined to organize their funds reasonably. Based on these facts, the first hypothesis is expressed like this:

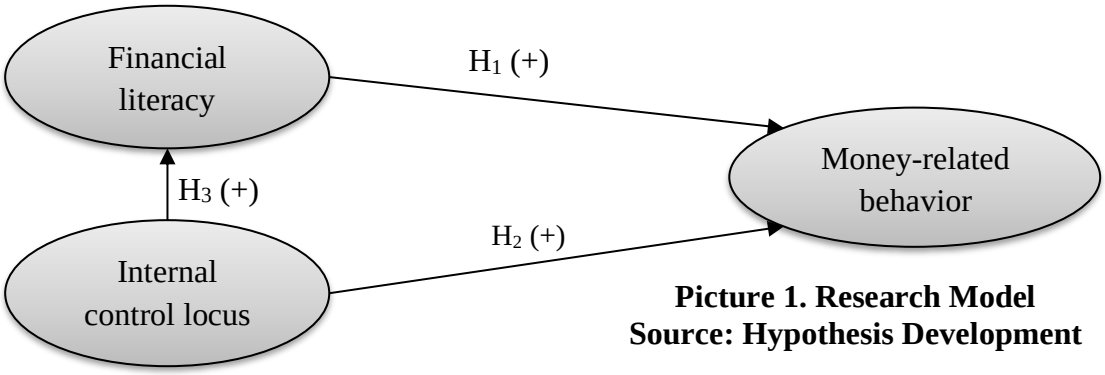
H_2: The person with a high internal control locus will financially behave well.

The relationship between internal control locus and financial knowledge

In the study at Surabaya State University, Susanti (2016) utilizes the undergraduate students from two departments, i.e., accounting and educational accounting, totaling 228. After investigating their perspective, this study proves a positive effect of the internal control locus on financial knowledge. Based on these facts, the third hypothesis is expressed like this:

H_3: The person with a high internal control locus will be financially knowledgeable.

Based on these framed hypotheses, the first picture containing the research model can be shaped as follows.



Picture 1. Research Model
Source: Hypothesis Development

3. Research Methods

Variable Definition

By viewing the first picture, the internal control locus (ICL) is employed as an exogenous variable. On the other hand, financial knowledge (FL) and money-related behavior (MRB) are treated as endogenous variables.

a. The items to measure the internal control locus denote Bapat (2020) as seen as follows:
   1. I can find the solution for my issues (ICL1).
   2. I can change essential things in my life (ICL2).
   3. I can attain what I think about (ICL3).

b. The items to measure the financial knowledge refers to Perry & Morris (2005) as seen as follows:
   1. I can explain the interest rate, finance charges, and credit terms (FK1).
   2. I can explain credit ratings and files (FK2).
   3. I can explain how to invest money (FK3).
   4. I can accurately describe a credit report (FK4).

c. The items to measure the money-related behavior refers to Perry & Moris (2005), as seen as follows:
   1. I can control my expenditure (MRB1)
   2. I can pay bills punctually (MBR2).
   3. I can arrange my financial plan (MRB3).
   4. I can search for money for myself (MRB4).
   5. I can save my money in the bank (MRB5).

Population and Samples

This study population is active undergraduate accounting students at Maranatha Christian University in 2021. Their batch is from 2015, 2016, 2017, 2018, 2019, and 2020 with 413 persons. Furthermore, to determine the number of samples (n), the formula Michael and Isaac in Sugiyono (2012) with the 5% significance level, the degree of freedom of one to find the Chi-Square (χ^2) statistic of 3.841, and P, Q = 0.5, d =0.05, in equation one.

$$n = \frac{\chi^2\ statistic.N.P.Q}{d^2(N-1)+\chi^2\ statistic(0.5)(0.5)} = \frac{\chi^2\ statistic.N.(0.5)(0.5)}{0.05^2(N-1)+\chi^2\ statistic(0.5)(0.5)} \quad \ldots\ldots\ldots\ldots \quad (1)$$

By denoting this formula, the number of samples is $\frac{3.841(413).(0.5)(0.5)}{0.05^2(413-1)+3.841(0.5)(.05)} = 199.27 \approx 200$ students (rounded). Furthermore, they are obtained by the stratified random sampling method with the allocation in Table 1.

Table 1. The total population and samples

Batch	The total population	Allocation	The number of samples (rounded)
2015	20	4.84%	10
2016	28	6.78%	14
2017	94	22.76%	45
2018	128	30.99%	62
2019	91	22.03%	44
2020	52	12.59%	25
Total	413	100%	200

Source: Calculation Result by the authors based on the administration office data

Data Collection Method

We collect data associated with the students via the survey. Sugiyono (2012) explains that researchers distribute the questionnaire to respondents through this method. Furthermore, the students can choose one point reflecting their answer based on five points on the Likert scale, starting from one until five for the powerfully unsupportive and supportive responses, respectively.

Data Analysis Method

This study uses the structural equation model based on covariance to investigate the data. This model is applied because all variables are indirectly observable, and the samples near 200, as Ghozali (2014) enlightens. This model can be located in the second and third equations:

$$MRB_i = \gamma_1 ICL_i + \beta_1 FL_i + \zeta_{i1} \quad \text{(2)}$$

$$FL = \gamma_1 ICL_i + \zeta_{i2} \quad \text{(3)}$$

.

Moreover, we use confirmatory factor analysis (CFA) to test the instrument to validate the responses. The Cronbach Alpha analysis is utilized to ensure the valid answers are reliable. The CFA compares the loading factor with a specific cut-off value of 0.5 (Ghozali, 2014).

a. The items with loading factors exceeding 0.5 must be kept because they are accurate.
b. Conversely, the items with a loading factor below or the same as 0.5 have to be removed because they are inaccurate.

The consistency test compares the composite reliability coefficient from the valid response with a specific cut-off of 0.7. If this coefficient is above 0.7, the accurate answer is reliable, and vice versa (Sholihin & Ratmono, 2013).

Before testing the hypotheses statistically, the model fits have to be detected. In this study, these fits are identified by some measurement, i.e., the chi-square statistical probability, the Chi-square/DF, comparative fit index, the goodness of fit index, Tucker Lewis index, root mean square error of approximation, parsimony ratio,

parsimony normed fit index, and parsimony comparative fit index, as Latan (2013) and Ghozali (2014) exhibit.

4. Results

The result of the respondent features

The survey is held for two weeks, i.e., March 16-31, 2021. It gets 193 of 200 targeted students as the samples; therefore, the participation level is 96.50%. Furthermore, their number based on gender, age range, and batches are accessible in Table 2.

Table 2. The Profile of the Students

Profile	Description	Total students	Percentage
Gender	Male	68	35.23%
	Female	125	64.77%
Age	Between 18 and 20 years old	91	47.15%
	Between 21 and 23 years old	99	51.30%
	Between 24 and 26 years old	3	1.55%
Batch	2015	7	3.63%
	2016	13	6.74%
	2017	42	21.76%
	2018	62	32.12%
	2019	44	22.80%
	2020	25	12.95%

Source: The modified output of IBM SPSS 20.

The Validity Test Result

Table 3 exhibits the validity testing result to reflect the internal control locus with the loading factor exceeding 0.5: 0.633 for ICL1, 0.668 for ICL2, and 0.679 for ICL3. Because these values are more significant than 0.5, the valid answer of the respondents occurs.

Table 3. The Loading Factor of Items Reflecting Internal Control Locus

Item	Loading factor	Meaning
ICL1 ← ICL I can find the solution to my issues.	0.633	A valid answer exists.
ICL2 ← ICL I can change essential things in my life.	0.668	A valid answer exists.
ICL3 ← ICL I can attain what I think.	0.679	A valid answer exists.

Source: The modified output of IBM SPSS AMOS 20.

Table 4 presents the validity testing result of items to reflect financial knowledge with the loading factor exceeding 0.5: 0.705, 0.823, and 0.564 for FK1, FK2, and FK3. Because of this situation, the valid answer of the respondents happens.

Table 4. The Loading Factor of Valid Items Reflecting Financial Knowledge

Item	Loading factor	Meaning
FK1 ← FK I can explain the interest rate, finance charges, and credit terms.	0.705	The response is valid.
FK2 ← FK I can explain credit ratings and files.	0.823	The response is valid.
FK3 ← FK I can explain how to invest money.	0.564	The response is valid.
FK4 ← FK I can explain a credit report.	0.732	The response is valid.

Source: The modified output of IBM SPSS AMOS 20.

Regarding the validity test of money-related behavior, we find the invalid response on MRB2 and MRB4 in the starting stage. This situation happens because the loading factor is 0.485 and 0.438, respectively. Thus, we eliminate them from the analysis; the final result can be seen in Table 5. In this table, all responses to MRB1, MRB3, and MRB5 are valid, reflected by their loading factor of 0.756, 0.787, and 0.637, which are above 0.5.

Table 5. The Loading Factor of Valid Items Reflecting Personal Financial Behavior

Item	Loading factor	Meaning
MRB1 ← MRB I can control my cash outflow.	0.756	A valid response exists.
MRB3 ← MRB I can arrange my financial plan.	0.787	A valid response exists.
MRB5 ← MRB I can save my money in the bank.	0.637	A valid response exists.

Source: The modified output of IBM SPSS AMOS 20.

The Reliability Test Result

Table 6 demonstrates the composite reliability coefficient for the accurate items. The internal control locus, financial knowledge, and money-associated behavior coefficients are 0.833, 0.867, and 0.867, respectively. Because they are above 0.7, the valid answer of all the items is consistent.

Table 6. The Reliability Test Result

The variables	Total valid Items	Name of the items	Composite reliability coefficient
Internal Control Locus	3	ICL1, ICL2, ICL3	0.833
Financial Knowledge	4	FK1, FK2, FK3, FK4	0.867
Money-related behavior	3	MRB1, MRB3, MRB5	0.867

Source: Calculated based output of IBM SPSS AMOS 20

The Test Result of the Goodness-of-fit Model

The goodness-of-fit test functions to ensure the fitness between the model and the empirical data (see Table 7). Because all the measurement values attain the necessary point in Table 7, the model fits with the data.

Table 7. The goodness of fit of the structural equation model based on covariance

Measurement	Value	The compulsory circumstance	Interpretation
Probability of Chi-Square	0.092	The probability should be above the 5% significance level (Ghozali, 2014).	All values achieve each critical condition; therefore, the model fits with the employed data.
Chi-square/DF	1.345	The Chi-square/DF should be below 2 (Ghozali, 2014).	
Comparative fit index (CFI)	0.980	CFI, GFI, and TLI should be > 0.95 (Latan, 2013).	
The goodness of fit index (GFI)	0.959		
Tucker Lewis index (TLI)	0.973		
Root mean square error of approximation (RMSEA)	0.042	RMSEA should be ≤ 0.05 (Latan, 2013).	
Parsimony ratio (PRATIO)	0.711	P-RATIO, PNFI, and PCFI should be above 0.6 (Latan, 2013).	
Parsimony normed fit index (PNFI)	0.661		
Parsimony comparative fit index (PCFI)	0.697		

Source: The modified output of IBM SPSS AMOS 20.

The Model Estimation Result

Table 8 presents the covariance-based structural equation model estimation result: critical ratio probability for testing a causal relationship in the first and second hypotheses.

a. The probability of the relationship between financial knowledge and behavior is 0.272. Therefore, the null hypothesis is acceptable regarding this value going above the 5% significant level: financial knowledge does not affect students to act financially.
b. The probability of the relationship between internal control locus and financial behavior is ***: 0.000. Thus, the null hypothesis is declined regarding this value going below the 5% significant level: the person with a high internal control locus will financially behave well is acceptable.
c. The probability of the relationship between internal control locus and financial knowledge is ***: 0.000. Hence, the null hypothesis is declined regarding this value going below the 5% significant level: the person with a high internal control locus will financially be knowledgeable is acceptable.

Table 8. The Estimation Result of the Structural Equation Model

Hypothesis	The Causal Relationship	Standardized Path Coefficient	Critical ratio	Probability	The testing result of the statistical hypothesis
H_1	Financial knowledge → Money-related behavior	-0.119	-1,099	0.272	The null hypothesis is accepted.
H_2	Internal Control Locus →Money-related behavior	0.700	4.853	***	The null hypothesis is rejected.
H_3	Internal Control Locus → Financial knowledge	0.519	4.732	***	The null hypothesis is rejected.

Source: The modified output of IBM SPSS AMOS 20.

Discussion

The first statistical hypothesis testing shows that financial knowledge does not affect students to act financially. It happens because the personal financial management subject is not yet in the curriculum. In other words, no guarantee declaring when students already learn the financial management principles, they can perform this personal behavior properly. It is due to the different contents between these subjects. Financial management informs the students how a firm obtains inexpensive funds to start a business and invests them in productive assets to gain profits (Gitman & Zutter, 2012). On the other side, personal financial planning only focuses on managing the risks, covering them with insurance, investing for the future, and preparing for an individual tax report, retirement, and wealth distribution (Financial Planning Standards Board Indonesia, 2013).

The second statistical hypothesis testing expresses that the person with a high internal control locus will financially behave well. It means the students realize that their inner power is the capital to succeed. They can solve problems logically, change their lives to be better, and work hard to make their dreams come true. These features enable them to govern money well, such as controlling cash outflow, planning money effectively, and saving the remaining money in their bank account. By this indication, this study supports Pinjisakikool (2017), Arifin et al. (2019), and Bapat (2020). The third statistical hypothesis testing illustrates that the individual with a high internal control locus will be financially well-educated. This locus gives more awareness to the students to believe in themselves based on their ability. Educated persons use their brains to think and understand all matters easily, including the contents related to financial knowledge. As evidenced by this positive effect, this study confirms the study of Susanti (2016).

5. Conclusion and Suggestion

The research aims to prove and analyze the effect of financial knowledge and internal control locus on money-related behavior by surveying undergraduate accounting students' perceptions at Maranatha Christian University. Unfortunately, this research cannot verify the financial knowledge impact on behavioral money by denoting the statistical data examination. This situation happens because of the personal financial planning subject's absence in the existing curriculum. Thus, this subject has to be initiated. Unlike the first result, this research's second and third

evidence demonstrates that internal control locus positively affects managing money and learning financial knowledge. This situation means that the higher this locus, the greater their ability to manage their money and understand financial knowledge.

This study cannot prove the money-related knowledge effect on this behavior, and it is due to the absence of a personal financial management subject in the curriculum. Based on this proof, we recommend that the accounting department provide this subject to equip the students with financial knowledge. After that, they can be directed to follow the registered financial planner examination. After passing this test, the students will have the certification as one of the essential files recorded in the diploma supplement. This suggestion to provide this subject is also emphasized by 87.56% of the 169 supporting responses from the 193 participating students.

Theoretically, this study has some confines, such as the narrow population scope and few determinants of money-related behavior. This situation allows the succeeding scholars to improve their research by following these suggestions.

1. They can broaden the population scope by combining undergraduate management and accounting students to be the samples from some universities in one city, for example, in Bandung, or one province, for instance, West Java, or all provinces in Indonesia.
2. They can add some determinants of money-related behavior like the demographics: tribe, gender, age, parental income; the academic performance: grade point average; the others: financial attitude, self-perception, self-control, peer influence, parent socialization, and financial risk tolerance.

References

1. Aghababaei, M. E., & Khademi, S. (2019). Factors affecting personal financial management behaviors – The case of Iranian youth. *Journal of Financial Management Strategy*, *7*(1), 123-143. https://www.sid.ir/en/journal/JournalListPaper.aspx?ID=275194
2. Akben-Selcuk, E. (2015). Factors influencing college students' financial behaviors in Turkey: Evidence from a national survey. *International Journal of Economics and Finance, 7(*6), 87-94. https://www.doi.org/10.5539/ijef.v7n6p87
3. Arifin, A., Anastasia, I., Siswanto, H., & Henny, H. (2019). The Effects of Financial attitude, locus of control, and income on financial behavior. *The 7th International Conference on Entrepreneurship and Business Management* (pp. 59-66). Science and Technology Publications, Lda. All. https://www.doi.org/10.5220/0008488200590066
4. Bapat, D. (2020). Antecedents to responsible financial management behavior. *International Journal of Bank Marketing, 38*(5), 1177-1194. https://www.doi.org/10.1108/IJBM-10-2019-0356
5. Britt, S., Cumbie, J. A., & Bell, M. M. (2013). The influence of locus of control on student financial behavior. *College Student Journal, 47*(1), 178-184.

https://www.ingentaconnect.com/contentone/prin/csj/2013/00000047/00000001/art00018
6. Cude, B., Lawrence, F., Lyons, A., Metzger, K., LeJeune, E., Marks, L., & Machtmes, K. (2006). College students and financial literacy: What they know and what we need to learn. *Eastern Family Economics and Resource Management,* (pp. 102-109). http://www.fermascholar.org/wp-content/uploads/2013/07/22-college-students-and-fin-literacy.pdf
7. Financial Planning Standards Board Indonesia. (2013). *The Guidelines for Examination and Financial Planning Standards Board Certification in Indonesia.* http://www.fpsbindonesia.net/download/PEDOMAN_SERTIFIKASI_FPSB_INDONESIA_2013.pdf
8. Ghozali, I. (2014). *Structural Equation Model: The concepts and Their Applications with The Program of AMOS 22.0.* Semarang: Badan Penerbit Universitas Diponegoro.
9. Gitman, L., & Zutter, C. (2012). *Principle of Managerial Finance* (13 ed.). Boston: Prentice-Hall.
10. Grable, J. E., Park, J. Y., & Joo, S. H. (2009). Explaining financial management behavior for Koreans living in the United States. *The Journal of Consumer Affairs, 43*(1), 80-107. https://doi.org/10.1111/j.1745-6606.2008.01128.x
11. Ida, I., & Dwinta, C. Y. (2010). The effect of locus of control, financial knowledge, and income on financial management behavior. *Jurnal Bisnis dan Akuntansi, 12*(3), 131-144. http://jurnaltsm.id/index.php/JBA/article/view/202/178
12. Latan, H. (2013). *Structural Equation Model: Theory and Implementation through AMOS 21.0.* Bandung: Alfabeta.
13. Mien, N. T. N., & Thao, T. P. (2015). *Factors affecting personal financial management behaviors: Evidence from Vietnam.* The Second Asia-Pacific Conference on Global Business, Economics, Finance, and Social Sciences, (pp. 1-10). Danang. Retrieved from http://globalbizresearch.org/Vietnam_Conference/pdf/VL532.pdf
14. Pathirannahalage, S., & Abeyrathna, G. M. (2020). Factors affecting to personal financial management behaviors of government employees in Sri Lanka. *International Journal of Scientific and Research Publications, 10*(5), 761-767. http://dx.doi.org/10.29322/IJSRP.10.05.2020.p10188
15. Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior. *The Journal of Consumer Affairs, 39*(2), 299-313. https://*doi*.org/*10.1111/j.1745-6606.2005.00016.x*
16. Pinjisakikool, T. (2017). The effect of personality traits on households' financial literacy. *Citizenship, Social, and Economics Education, 16*(1), 39-51. https://doi.org/10.1177/2047173417690005
17. Robb, C. A., & Woodyard, A. S. (2011). Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning, 22*(1), 60-70. https://files.eric.ed.gov/fulltext/EJ941903.pdf
18. Sholihin, M., & Ratmono, D. (2013). *The analysis of SEM-PLS by the WarpPLS 3.0.* Yogyakarta: Penerbit ANDI.
19. Sugiyono, S. (2012). *Research Method of Quantitative, Qualitative, and Combination (Mixed Method).* Bandung: Alfabeta.
20. Susanti, S. (2016). The effect of internal control locus and received money on financial literacy of students. *Jurnal Ekonomi Pendidikan dan Kewirausahaan, 4*(1), 5-17. https://doi.org/10.26740/jepk.v4n1.p5-17
21. Wardhani, A. S. (2020, December 23). *The four ways to avoid the scam of sweepstake programs on WhatsApp, SMS, and social media*. Retrieved April 5, 2021, from https://www.liputan6.com/tekno/read/4439578/4-cara-hindari-penipuan-modus-program-undian-di-whatsapp-sms-dan-medsos

22. Widowati, M., & Winarto, W. (2017). The financial literacy of the actors of the small and medium enterprises in Semarang. *Jurnal Ilmiah Akuntansi dan Keuangan, 3*(*2*), 114-122. http://jurnal.poliupg.ac.id/index.php/infak/article/view/176/95
23. Zulfaris, M. D., Mustafa, H., Mahussin, N., Alam, M. D., & Daud, Z. M. (2020). Students and money management behavior of a Malaysian public university. *Journal of Asian Finance, Economics, and Business, 7*(3), 245-251. https://doi.org/10.13106/jafeb.2020.vol7.no3.245