

The role of mental accounting and financial attitudes in shaping financial behavior among entrepreneurial students using fintech

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ABSTRACT

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This study examines the influence of mental accounting, financial attitudes, financial knowledge, and financial self-efficacy on the financial behavior of diligent students in using fintech. This study differs from previous research because it uses a sample of students who already have a business and often use fintech. Data collection was carried out through the distribution of questionnaires to respondents. This study found that financial attitudes and self-efficacy had a significant effect on financial behavior, while financial knowledge had no significant effect on financial self-efficacy and mental accounting. Mental accounting significantly affects financial attitudes, financial behavior, and financial self-efficacy. These findings prove the importance of mental accounting in increasing the confidence and effectiveness of students who often use fintech and have a business in making financial decisions. This research contributes to developing the theory of planned behavior in the context of financial behavior. It reveals that financial literacy does not necessarily increase financial self-efficacy and mental accounting, especially among students who often use fintech and are just starting a business.

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1. Introduction

Financial literacy still attracts the attention of governments, business people, and even researchers because of its relation to people's well-being. The increase in various banking and non-banking sectors' financial products raises the importance of people's financial literacy. With the people's high financial literacy, it is hoped that they will understand these various financial products and use them to increase their well-being. The current advancement of technology creates financial innovations in the form of non-cash payment cards, payment applications, and even electronic savings and loan applications. These innovations push individuals to be able to save, invest, and insure quickly and easily. However, suppose these innovations are not pushed with adequate financial knowledge. In that case, people will not be interested in buying these financial products or unable to manage their finances well enough, so they cannot optimize the available financial products. Good financial management is encouraged by a person's behavior that is related to how they manage their finances in the current time or the future. Financial behavior influences a person's perception of their life's well-being and how content they are with their economic condition (Saurabh & Nandan, 2018). Parrey and Hakeem (2018) and Yong et al. (2018) find that individuals with excellent financial behavior will be able to control their spending, pay their bills in a disciplined manner, and commit to financial planning in the future. Financial behavior is not unrelated with several aspects that influence it such as financial attitude, financial knowledge, and financial self-efficacy, although the interactions between these variables are still inconsistent (Asaff et al., 2019; Çoşkun & Dalziel, 2020; Faktor et al., 2020; Kirbis et al.,

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2016; Bakar & Bakar, 2020). Srivastava et al. (2019) find that the human brain factor influences financial behavior, especially when making financial decisions. It is as if the brain makes different accounting accounts, influencing decision-making. This difference is due to a psychological aspect known as mental accounting (Hsee & Kunreuther, 2000). Mental accounting is a cognitive aspect individuals and households use to control, evaluate, monitor, and track financial activities (Thaler, 1999). This definition states that mental accounting is how a person sees, groups, and treats their finances. A person treats their finances by observing several aspects, including the ability to secure his income, the currently owned wealth, and the ability to secure incomes in the future. Mental accounting is influenced by the person's knowledge and understanding of finance (Shefrin & Thaler, 1988). From these descriptions, it can be said that mental accounting can be shown by an individual's implementation of accounting principles in his financial activity so that mental accounting will influence financial behavior. Only a few studies investigate the interaction of mental accounting with financial attitude, financial knowledge, and financial self-efficacy in influencing financial behavior.

This study aims to test the interaction of mental accounting with financial attitude, financial knowledge, and financial self-efficacy in influencing financial behavior. In particular, this study also tests the influence of financial attitude on financial behavior, financial knowledge on financial attitude, financial knowledge on financial self-efficacy, financial knowledge on mental accounting, mental accounting on financial self-efficacy, and financial self-efficacy on financial behavior. Studies about financial behavior have been conducted many times using students as the sample, both school and university students (Agnew & Harrison, 2015; Sarigül, 2014; Ibrahim et al., 2010; Radianto et al., 2019; Huston, 2010; Sugiyanto, Radianto, Efrata, & Dewi, 2019). This research differs from the previous one because this study uses students who consistently use fintech, are taking entrepreneurship studies, and already have a business.

2. Literature Review

Financial Behavior is essential in influencing individuals' well-being in their households, communities, countries, and the world (Mudzingiri, Muteba, Keyser, & Nicolaas, 2018). Internal factors influencing financial behavior are cognitive ability and psychological factors, while external factors include social and economic conditions (Capuano & Ramsay, 2012). Financial Behavior relates to how a person manages their finances, secures their income, and plans their spending. The Theory of Planned Behavior frames this study. This theory describes the connection between faith, behavior, will or intention, and financial behavior. This theory explored the interaction between financial knowledge, financial attitude, mental accounting, and financial self-efficacy to stimulate financial Behavior (Ajzen, 2012). Financial attitude is the state of mind, opinion, and assessment of a person's finances that are applied to the attitude of their connection to finances (Rai, Dua, & Yadav, 2019). Financial attitudes are essential in deciding whether a person succeeds in managing their finances (Çoşkun & Dalziel, 2020). Borden, Lee, Serido, & Collins (2008) and Herdjiono et al. (2016) find that financial attitude influences financial behavior, so the first hypothesis is as follows:

H₁: *Financial Attitude influences financial behavior.*

Financial knowledge refers to the knowledge stocks related explicitly to understanding concepts and financial products (Huston, 2010). Financial knowledge implies that individuals should have financial knowledge to support financial decision-making. Thus, they will act openly on financial information and cannot behave impulsively when consuming. A high level of financial knowledge will also result in a high financial attitude. That is, people will behave positively about the future so that they will be able to manage their finances wisely and will always be oriented towards the future (Lind et al., 2020). People with financial self-efficacy have a high confidence in managing their finances well. Amanah et al. (2016) find that a high level of financial knowledge will generally increase a person's confidence in making financial decisions. People's confidence and behavior in managing their finances are based on their level of financial knowledge (Yong et al., 2018). This shows that financial knowledge influences financial self-efficacy. Shefrin and Thaler (1988) and Thaler (1985) stated that individuals' knowledge and understanding of finance includes how they deal with financial decisions that impact their mental accounting. These descriptions are the basis of the second, third, and fourth hypotheses.

H₂: *Financial knowledge influences financial attitude.*

H₃: *Financial knowledge influences financial self-efficacy.*

H₄: *Financial knowledge influences mental accounting.*

Individuals' participation in their financial products shows how well they manage their private finances, how responsible they are financially, and if they think for the future (Bandura, 1978). A higher individual's confidence in their ability to manage their finances will impact their behavior in managing their finances. Several studies have been conducted before and found that Financial Self-Efficacy influences Financial Behavior (Farrell et al., 2016; Laili Rizkiawati & Asandimitra, 2018; Serido et al., 2013). These studies show that individuals have confidence in their ability to manage their finances better. The following fifth hypothesis is based on this statement, that is:

H₅: *Financial self-efficacy influences financial Behavior.*

Thaler (1999) defined mental accounting as an economic behavior when someone mentally groups their income and spending based on particular posts or accounts, just as in an accounting model. A person who possesses mental accounting

will have the tendency to group their finances into different accounts based on subjective criteria, such as the source of income and the intent of revenue spending (Angle et al., 2019), so mental accounting will influence a person's behavior in making their financial decision. According to Silaya and Persulesy (2017), mental accounting will limit a person's spending. This is due to the mindset of the spending posts category and the process of evaluating their spending, which will influence someone's financial behavior. Mental accounting continuously evaluates someone's financial decisions (Henderson & Peterson, 1992). When a person can evaluate their spending well, it will raise their confidence in managing their finances, just like managing finances based on several posts that already have their sources and purposes, so mental accounting focuses on how a person should deal with and evaluate a situation when there are two or more possible results that are related with finances. These descriptions are the basis for the following three hypotheses:

H₆: *Mental Accounting influences financial attitude.*

H₇: *Mental Accounting influences financial Behavior.*

H₈: *Mental Accounting influences financial self-efficacy.*

3. Research Method

This research uses primary data collected using questionnaires gathered by the survey method. The questionnaires were sent to business-starting entrepreneurs with the help of enumerators who met the respondent candidates in person. Six hundred questionnaires were distributed. Four hundred sixty-one questionnaires were successfully returned, which means the return level is 77%, but only 400 questionnaires were filled, or 86.7% of the returned questionnaires. Table 1 summarizes the definition of this research's operant variables and their indicators.

Table 1
Operant Variables Definition

Variable	Indicator	Source
Financial Knowledge	Knowledge is needed to manage their finances and make financial decisions.	Van Rooij et al. (2012), Potrich et al. (2015)
Financial Attitude	The judgment, opinion, or state of mind of a person on finances that are applied to their behavior.	Potrich et al. (2015)
Financial Self-Efficacy	A person's confidence in managing their finances well	Lown (2011)
Mental Accounting	An operational cognitive set that is used to manage, evaluate, and ensure that one's financial activity is going according to plan	Shefrin & Thaler (1988), Thaler (1999)
Financial Behavior	A person's behavior is related to financial management.	Potrich et al. (2015)

Each indicator shown in Table 1 is stated in the Likert Scale, in which response 1 is for Strongly Disagree and so on until response eight is for Strongly Agree. The analysis tool used in this study is Partial Least Square (PLS). PLS is a powerful analysis method because it is not based on assumptions and can explain the relations between latent variables (Ghozali, 2013).

4. Result

As mentioned before, in the Research Method, 400 pieces of data can be processed and used as the final research sample. The distribution of the demography of the respondents' data is shown in Table 2.

Table 2
Distribution of Research Respondents' Demography (n=400)

No	Category	Description	Quantity	Percentage
1	Gender	Male	256	64%
		Female	144	36%
2	Age	< 20 years old	106	27%
		20-25 years old	212	53%
		> 25 years old	82	21%
3	Monthly spending	< 5 million	280	70%
		5-10 million	88	22%
		> 10 million	32	8%
4	Ethnicity	Javanese	130	32.5%
		Chinese	241	60.3%
		Sundanese	2	0.5%
		Batak	1	0.3%
		Arabic	2	0.5%
		Others	24	6.0%
5	Business Duration	< 3 years	295	74%
		3-5 years	70	18%
		> 5 years	35	9%

As seen from Table 2, male respondents make up 64% of the total respondents, while female respondents make up 36%. On average, the respondents are young, with 106 respondents being less than 20 years old (27% of the respondents) and 212 respondents between 20 and 25 years old (53% of the respondents). The majority of the respondents, 280 respondents, spend less than 5 million monthly (70% of the respondents). The ethnicities of the respondents are dominated by Javanese, with 130 respondents, and Chinese, with 241 respondents (32.5% and 60.3% of the respondents). The rest are Sundanese, Batak, Arabic, and other ethnicities. The majority of the respondents have run their business for less than three years, at 295 respondents (74% of the respondents). The data from Table 2 show that the characteristics of the respondents in this research are young entrepreneurs who have run their business for less than three years, ethnically Javanese and Chinese, with a monthly spending of less than 5 million. The descriptive analysis of each research variable is shown in Table 3. It is seen in the table that the average respondents' answers for financial attitude are close to the value of 6 or a bit less than 6. Meanwhile, for financial self-efficacy, mental accounting, and financial Behavior, the answers are close to the value of 5. These results mean that, on average, the respondents' answers agree with the indicators questioned.

Table 3
Descriptive Statistic of Research Variables

No	Variable	Number of Indicator	Average	Standard Deviation
1	Financial Knowledge	5	0.6220	0.23887
2	Financial Attitude	8	6.3710	0.82611
3	Financial Self Efficacy	6	4.9012	0.97781
4	Mental Accounting	9	5.0128	0.98128
5	Financial Behavior	9	5.5208	0.83819

The first step in measurement model testing is the validity test. An indicator is declared valid if it has a loading factor greater than 0.5 on the aimed construct. Smart PLS output for the loading factor shows that all indicators have loading factors greater than 0.5. Overall, this means that all validity terms are fulfilled. The following are the detailed descriptions of the validity test results. The validity test for the reflective indicators uses the correlation between the item score and the construct score. The measurement using the reflective indicators shows that there are changes in the indicators of the constructs if other indicators of the exact constructs change (or are eliminated from the model). Reflective indicators are well suited to measure perceptions, so this research uses them. According to Hair et al. (2017), all *outer loading* indicators with a result that is less than 0.4 will be eliminated immediately, while *outer loadings* with a score between 0.4 and 0.7 must be considered if they can increase the AVE value and CR above the threshold value. In line with Hair et al. (2017), the elimination processes are done in steps so that the final model that is obtained is as follows:

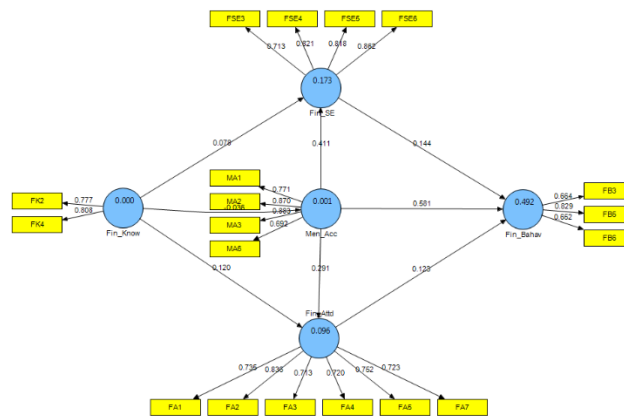


Fig. 1. Measurement Models

The evaluation of the measurement model for the reflective variables consists of internal consistency, measured by the CR value; indicator reliability; convergent validity, measured by the AVE value; and discriminant validity (Hair et al., 2017). In PLS-SEM, individual reliability is more prioritized than the reliability measured based on the intercorrelation between the variables in the model. For that, in PLS-SEM, measuring the composite reliability (CR) is more accurate than using Cronbach's Alpha (Hair et al., 2017).

Table 4
Composite Reliability

Variable	Composite Reliability
Financial Attitude	0.883
Financial Behavior	0.761
Financial Knowledge	0.771
Financial Self-Efficacy	0.880
Mental Accounting	0.882

From Table 4 it can be seen that the value of the lowest composite reliability value is 0.761 on the financial Behavior variable, and the highest is 0.883 on the financial attitude variable. The CR values between 0.70 and 0.90 are satisfactory (Nunnally & Bernstein, 1994). The next step is to perform the Convergent Validity test. To measure convergent validity, every indicator from the variables must be reliable. To measure indicator reliability, the outer loading value should be > 0.708 . However, a value below that threshold can still be considered as long as the indicator elimination can increase the average variance extracted (AVE) and composite reliability (CR) (Hair et al., 2017). Meanwhile, a value below 0.4 must be eliminated (Hair et al., 2011). In line with those statements, the model has been improved by eliminating several indicators. The minimum values of most of the outer loadings are > 0.708 . However, several outer loading values are still less than the threshold value. These are allowed as long as the AVE value of each variable is more significant than 0.5. The AVE value is the total average from the square of the loading value of each indicator divided by the number of indicators. The AVE value is used to decide the convergent validity of each variable. A variable is considered as fulfilling the convergent validity requirement if it has the AVE value of > 0.5 .

Table 5
Average Variance Extracted

Variable	AVE
Financial Attitude	0.558553
Financial Behavior	0.517723
Financial Knowledge	0.628002
Financial Self-Efficacy	0.648669
Mental Accounting	0.652570

Referring to Table 5, it can be seen that the average AVE value of each variable is more significant than 0.5. So, it can be concluded that, on average, the constructs describe the majority of the variants from the indicators. The last step of the validity testing is Discriminant Validity, which describes how different a construct is in the research from the other present constructs in the model. The validity here shows that a construct is unique in capturing an existing phenomenon and is different from the other constructs in the model. A construct is declared as fulfilling the discriminant validity requirement if its outer loading indicator value is more significant than all cross-loading factors from the other constructs. The discriminant validity testing uses the Fornell-Larcker criterion (Hair et al., 2017; Fornell & Larcker, 1981), which compares the square root of the AVE with the absolute value from the variable correlation value. The square root of the AVE value must be greater than the highest variable correlation value.

Table 6
Fornell-Larcker Criterion

Variable	Financial Attitude	Financial Behavior	Financial Knowledge	Financial Self-Efficacy	Mental Accounting
Financial Attitude	0.747364				
Financial Behavior	0.326208	0.719529			
Financial Knowledge	0.109267	-0.005519	0.792465		
Financial Self-Efficacy	0.251278	0.412518	0.063564	0.805399	
Mental Accounting	0.286614	0.675208	-0.035696	0.408210	0.807818

The diagonal values in Table 6 show the square root of the AVE value. The table shows that the square roots of the AVE values are more significant than the correlation variable values on the relevant column or row. So, it can be concluded that using these two testing methods, each construct consistently fulfils the discriminant validity requirement. After the estimated model fulfils the Outer Model criteria, the next step is to perform the model structural (Inner model) testing. According to (Hair et al., 2017), the evaluation of the structural model for the PLS-SEM includes size and significance, coefficients of determination (R^2), and predictive relevance (Q^2).

Table 7
Path Coefficient Hypotheses Test

Path	Coefficient	t - Statistics	p-Value
Financial Attitude \rightarrow Financial Behavior ***	0.423066	2.656019	0.0082
Financial Attitude **	0.091244	1.824398	0.0688
NS	0.121815	1.209322	0.2273
NS	-0.063591	0.496721	0.6197
Financial Behavior ***	0.242349	3.025683	0.0026
Financial Attitude ***	0.124520	5.708730	0.0000
Financial Behavior ***	0.852271	13.471601	0.0000
***	0.359230	8.007992	0.0000

H_1 , H_2 , H_3 , H_4 , H_7 and H_8 are proven, but coefficients of determination (R^2), predictive relevance (Q^2). It can be seen in Table 8 that, in general, the R^2 value is in the range of close to 0.5 to close to 0.

Table 8
Outer Model Testing

Variable	R ²	Q ²
Financial Attitude	0.096	0.043793
Financial Behavior	0.492	0.236004
Financial Knowledge		0.013126
Financial Self-Efficacy	0.172	0.104027
Mental Accounting	0.001	-0.000943

Table 8 indicates that except for the Mental Accounting variable, the other variables' Q² values are greater than 0, so this result supports the existence of the predictive relevance of the model to the endogenous variable. On the Financial Behavior variable (exogenous variable), the Q² value is 0.236 or greater than 0, meaning the structural model has a predictive relevance.

5. Discussion

Financial Attitude influences financial Behavior. A person with the proper behavior in finance influences how they manage their money and make decisions about their finances. People who feel that managing their finances is essential will act carefully when spending their money. For example, when people feel that controlling their spending is essential, they compare the prices and check their finances when shopping. The more excellent the financial attitude of a person, the greater their financial Behavior will be. That means the proper behavior in managing finances will improve a person's skill in managing their money. This study supports those conducted by Çoşkun & Dalziel (2020), Borden et al. (2008), and Herdjiono et al. (2016). Financial knowledge positively influences financial attitude. A person's ability to understand finance will give them the proper behavior in managing and pursuing their finances. The greater the financial knowledge, the greater the financial attitude. A person with good knowledge about stock investment will reason that stocks are critical as a medium for future investment. Likewise, if people understand the functions and benefits of saving, it will influence them that regularly saving their money is essential as a backup. This study supports a previous study by Huston (2010), which stated that a person with financial understanding can make financial decisions. This study also confirms a study by Lind et al. (2020) that finds financial knowledge influences financial attitude. However, this study finds that financial knowledge does not influence financial self-efficacy or mental accounting. Understanding and having financial knowledge do not ensure a person is confident in their ability to manage their finances. (Prihartono & Asandimitra, 2018; Herdjiono, Damanik, & Musamus, 2016; Lianto & Elizabeth, 2017). A person with financial knowledge cannot be used as a benchmark to find out whether they have good financial behavior, as discovered by previous studies (Rizkiawati & Asandimitra, 2018; Armilia & Isbanah, 2019; Hendra, Yohana, & Herlina, 2019). In this study's findings, it seems that although the respondents are knowledgeable in finance, they are probably unconfident in fulfilling their needs due to a relatively young age factor. Even more so, if their businesses are not yet established, they will be worried about being unable to fulfill their needs. This can be expected from the relatively short lifetime of the respondents' businesses, which is mostly less than three years (74% of the respondents), which means those businesses are still stubs, as seen in Table 2. This proves that financial knowledge does not always form respondents' self-efficacy. It seems that the relatively young age of most respondents is still unable to exert self-control over their spending, although they have good financial knowledge. Likewise, their financial knowledge does not ensure they will be disciplined in monitoring their finances, such as recording and managing their finances with discipline. This could cause financial knowledge to not influence mental accounting. These two new findings contribute to the study of financial knowledge, which is that the entrepreneurs' age and the duration of their businesses cannot optimize their financial knowledge to form financial self-efficacy and influence their mental accounting.

Financial self-efficacy influences financial Behavior. Financial efficacy, which is the confidence that a person will be able to manage their finances, is proven in this study. A higher level of confidence in their ability to manage their finances will enable them to make the right financial decisions. For example, when a financial emergency happens, they will be confident in being able to fulfill what that emergency needs, so they will spend wisely to fulfill their needs first and not their wants. Likewise, suppose a person has a high financial self-efficacy when they have financial debts. In that case, those debts will not disturb their cash flow, so they can spend their money wisely, put aside some of their income as an emergency fund, or even put their investments in the right investment products. This means a person has confidence in their ability so that they will be able to manage their finances effectively and efficiently. This study supports previous studies on financial self-efficacy influencing financial Behavior (Farrell et al., 2016; Serido et al., 2013).

This study finds that mental accounting interacts positively with financial attitude, financial Behavior, and financial self-efficacy, so all three hypotheses are accepted. This study proves that mental accounting influences a person's Behavior when making financial decisions. The more mental accounting a person has, the better their Behavior on the correct financial management will be. The more mental accounting influences a person's thinking, the better the person makes the right financial decisions. This finding supports the CFP Board, Zhang, & Sussman (2018), who found that mental accounting can influence someone's behavior in selecting what kind of investments suit them. For example, when a person rationally thinks that recording their spending routinely is essential, he can monitor his spending every month. As a result, he will be more careful in making financial decisions such as shopping, investing and borrowing, and even saving. This study supports the study by Silaya and Persulesy (2017). Mental accounting influences a person in increasing their confidence that they can

manage their finances well. A person with mental accounting will feel uncomfortable if they do not make financial plans. Therefore, the more disciplined they are in planning their finances, the more confident they are in managing their finances, especially regarding investments and savings. Through disciplined and measured financial planning, they will be more confident that their future will be prosperous. This study supports the findings of Henderson & Peterson (1992). One of the crucial aspects of mental accounting is self-control. The tighter a person's self-control, the better they will control their finances (financial attitude). They will also be better at restraining themselves from buying things not included as needs (financial behavior). They are very confident that their savings will help them achieve a prosperous future (self-efficacy). This finding will be an addition to this study, which is that mental accounting influences financial attitude and financial self-efficacy, which have been rarely researched.

6. Conclusion

This study aims to test the influence of mental accounting, financial attitude, financial knowledge, and financial self-efficacy on the financial Behavior of university students who have already started their businesses. The uniqueness of this study compared to the previous ones is that the respondents played the roles of a student and a businessperson. The total of the processable questionnaires was 400, with the business-owning respondents mostly younger than 25 years old and having run their business for less than three years. The hypothesis testing is done using SMART-PLS. The result of this study shows that financial attitude and financial self-efficacy influence financial Behavior, mental accounting influences financial self-efficacy, financial attitude, and financial Behavior, and financial Behavior influences financial attitude. Meanwhile, financial knowledge does not influence financial attitude and mental accounting. The contribution of this study is especially on the part that mental accounting plays that are proven to influence self-efficacy, financial Behavior, and financial attitude. In this case, the process of mental accounting thinking increases a person's confidence in managing their finances well. The mental accounting process also increases the effectiveness of a person in making financial decisions, and mental accounting can also increase the ability of a person to deal with their financial conditions so that they can make financial decisions. The following contribution is that the knowledge of the entrepreneurs who are still starting their businesses has proven unable to influence mental accounting and financial attitudes. This study also contributes to the theory of planned behavior, especially in the context of financial behavior. The Behavior of a person's financial management can be explained through how someone processes financial information using the mental accounting that they have. Financial decisions will be limited by self-control and mental budgeting, essential parts of mental accounting. According to this theory, the most critical determinant of a person's behavior is their intent to behave. A positive financial management intent is how mental accounting monitors and controls financial management. In this case, the truth of financial behavior based on the process of mental accounting is believed, and a person believes that what they are doing is right. The limitation of this study is that it does not correlate with the family background of the respondents. Different family backgrounds will indeed influence the respondents' financial behavior. This will also open a new opportunity for the following study. The following study can also be done by filling the research gap of this study, which is that there is a chance of mediating variables between financial knowledge with financial self-efficacy and mental accounting. This study does not yet include the factor of mental accounting bias, so it is hoped that the following study will include that aspect.

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References

- Agnew, S., & Harrison, N. (2015). Financial literacy and student attitudes to debt: A cross national study examining the influence of gender on personal finance concepts. *Journal of Retailing and Consumer Services*, 25, 122–129. <https://doi.org/10.1016/j.jretconser.2015.04.006>
- Ajzen, I. (2012). *The theory of planned behavior*. Handbook of Theories of Social Psychology: Volume 1, 211, 438–459. <https://doi.org/10.4135/9781446249215.n22>
- Amanah, E., Rahadian, D., & Iradianty, A. (2016). Pengaruh Financial Knowledge, Financial Attitude dan External Locus Of Control Terhadap Personal Financial Management Behavior Pada Mahasiswa S1 Universitas Telkom [The Influence of Financial Knowledge, Financial Attitude and External Locus of Control on Personal Financial Management Behavior on Bachelor Degree Students in Universitas Telkom]. In *eProceedings of Management* (Vol. 3).
- Angle, P., Konidala, S., Ujwal, D., Vishnu, B., & Misra, S. (2019). Impact of Mental Accounting Bias on Stock Market Integration. *Journal of Xian University of Architecture and Technology*, 11(12), 283–304.
- Asaff, R., Suryati, & Rahmayani, R. (2019). Pengaruh Financial Attitude dan Financial Knowledge terhadap Financial Management Behavior (Studi Kasus pada Mahasiswa Fakultas Ekonomi Konsentrasi Keuangan Universitas Andi Djemma

- Palopo [The Influence of Financial Attitude and Financial Knowledge on Financial Management Behaviour (A Case Study on Bachelor Degree Students of Faculty of Economic Finance Major of Universitas Andi Djemma Palopo)]. *Journal of Economics, Management and Accounting*, 2(2), 68–74.
- Bakar, M. Z. A., & Bakar, S. A. (2020). Prudent Financial Behaviour among Youth: The Role of Financial Attitude. *International Journal of Management and Humanities*, 4(8), 30-34. <https://doi.org/10.35940/ijmh.H0765.044820>
- Bandura, A. (1978). Self-efficacy: Toward a unifying theory of behavioral change. *Advances in Behavior Research and Therapy*, 1(4), 139–161. [https://doi.org/10.1016/0146-6402\(78\)90002-4](https://doi.org/10.1016/0146-6402(78)90002-4)
- Borden, L. M., Lee, S. A., Serido, J., & Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. *Journal of Family and Economic Issues*, 29(1), 23–40. <https://doi.org/10.1007/s10834-007-9087-2>
- Capuano, A., & Ramsay, I. (2012). What Causes Suboptimal Financial Behavior? An Exploration of Financial Literacy, Social Influences and Behavioral Economics. *SSRN Electronic Journal*, (540). <https://doi.org/10.2139/ssrn.1793502>
- CFP Board, Zhang, C. Y., & Sussman, A. B. (2018). The Role of Mental Accounting in Household Spending and Investing Decisions. *Client Psychology*. <https://doi.org/10.1002/9781119440895.ch6>
- Çoşkun, A., & Dalziel, N. (2020). Mediation effect of financial attitude on financial knowledge and financial behavior. *International Journal of Research in Business and Social Science (2147- 4478)*, 9(2), 01–08. <https://doi.org/10.20525/ijrbs.v9i2.647>
- Faktor, A., Memengaruhi, Y., Management, F., Degan, B., Locus, M., & Control, O. F. (2020). Analisis faktor yang memengaruhi financial management behavior dengan mediasi locus of control [Analysing Factors that Affects Financial Management Behavior with Locus of Control as the Mediating Factor], 8, 549–563.
- Farrell, L., Fry, T. R. L., & Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance Behavior. *Journal of Economic Psychology*, 54, 85–99. <https://doi.org/10.1016/j.joep.2015.07.001>
- Henderson, P. W., & Peterson, R. A. (1992). Mental accounting and categorization. *Organizational Behavior and Human Decision Processes*, 51(1), 92–117. [https://doi.org/10.1016/0749-5978\(92\)90006-S](https://doi.org/10.1016/0749-5978(92)90006-S)
- Herdjiono, I., Damanik, L. A., & Musamus, U. (2016). Pengaruh Financial Attitude, Financial Knowledge, Parental Income Terhadap Financial Management Behavior [The Influence of Financial Attitude, Financial Knowledge, Parental Income on Financial Management Behavior]. *Manajemen Teori Dan Terapan*, 1(3), 226–241. <https://doi.org/10.20473/jmtt.v9i3.3077>
- Hsee, C. K., & Kunreuther, H. C. (2000). The Affection Effect in Insurance Decisions. *Journal of Risk and Uncertainty*, 20(2), 141–159. <https://doi.org/10.1023/A:1007876907268>
- Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
- Ibrahim, D. I. D., Harun, R., & Isa, Z. M. (2010). A study on financial literacy of Malaysian degree students. *Cross-Cultural Communication*, 5(4), 51–59. <https://doi.org/10.3968/j.ccc.1923670020090504.006>
- Kirbis, I. Š., Vehovec, M., & Galic, Z. (2016). Relationship Between Financial Satisfaction and Financial Literacy : Exploring. *Drus Istraz Zagreb God*, 26(2), 165–185.
- Laili Rizkiawati, N., & Asandimitra, N. (2018). Pengaruh Demografi, Financial Knowledge, Financial Attitude, Locus of Control Dan Financial Self-Efficacy Terhadap Financial Management Behavior Masyarakat Surabaya [The Influence of Demography, Financial Knowledge, Financial Attitude, Locus of Control and Financial Self-Efficacy on Financial Management Behaviour of the People of Surabaya]. *Jurnal Ilmu Manajemen (JIM)*, 6(3), 93–107.
- Lind, T., Ahmed, A., Skagerlund, K., Strömbäck, C., Västfjäll, D., & Tinghög, G. (2020). Competence, Confidence, and Gender: The Role of Objective and Subjective Financial Knowledge in Household Finance. *Journal of Family and Economic Issues*, (0123456789), 1–13. <https://doi.org/10.1007/s10834-020-09678-9>
- Lown, J. M. (2011). Development and validation of a financial self-efficacy scale. *Journal of Financial Counseling and Planning*, 22(2), 54.
- Mudzingiri, C., Muteba, M., Keyser, J. W., & Nicolaas, J. (2018). Financial behavior, confidence, risk preferences and financial literacy of university students. *Cogent Economics and Finance*, 6(1), 1–25. <https://doi.org/10.1080/23322039.2018.1512366>
- Parrey, S. H., & Hakeem, I. A. (2018). Financial Knowledge and Financial Behavior of Agri-Allied Entrepreneurs: A Mediation Study of Cultural Values. *Sankalpa*, 8(2), 1–11.
- Potrich, A. C. G., Vieira, K. M., Coronel, D. A., & Bender Filho, R. (2015). Financial literacy in Southern Brazil: Modeling and invariance between genders. *Journal of Behavioral and Experimental Finance*, 6, 1–12. <https://doi.org/10.1016/j.jbef.2015.03.002>
- Radianto, W. E. D., Efrata, T. C., & Dewi, L. (2019). Level of Financial Literacy in Young Entrepreneurs: Study on Entrepreneurship-based University. *In KnE Social Sciences* (pp. 385–398).
- Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude, Financial Behavior and Financial Knowledge Towards Financial Literacy: A Structural Equation Modeling Approach. *FIIB Business Review*, 8(1), 51–60. <https://doi.org/10.1177/2319714519826651>
- Sarigül, H. (2014). A Survey of Financial Literacy Among University Students. *Journal of Accounting & Finance*, 64, 207–224.
- Saurabh, K., & Nandan, T. (2018). Role of financial risk attitude and financial behavior as mediators in financial satisfaction:

- Empirical evidence from India. *South Asian Journal of Business Studies*, 7(2), 207–224. <https://doi.org/10.1108/SAJBS-07-2017-0088>
- Serido, J., Shim, S., & Tang, C. (2013). A developmental model of financial capability: A framework for promoting a successful transition to adulthood. *International Journal of Behavioral Development*, 37(4), 287–297. <https://doi.org/10.1177/0165025413479476>
- Shefrin, H. M., & Thaler, R. H. (1988). The behavioral life-cycle hypothesis. *Economic Inquiry*, 26(4), 609–643. <https://doi.org/https://doi.org/10.1111/j.1465-7295.1988.tb01520.x>
- Silaya, M. A., & Persuleddy, G. (2017). Mental accounting Dan Faktor Demografi: Fenomena Penggunaan Kartu Kredit Pada Pegawai Bank Danamon Cabang Ambon [Mental Accounting and Demography Factor: The Phenomenon of Credit Cards Usage of the Employee Of Ambon Branch of Bank Danamon]. *Jurnal Soso-Q*, 5(1), 57–67. <https://doi.org/10.30598/sosoq.v5i1.112>
- Srivastava, M., Sharma, G. D., & Srivastava, A. K. (2019). Human brain and financial behavior: a neurofinance perspective. *International Journal of Ethics and Systems*, 35(4), 485–503. <https://doi.org/10.1108/IJOES-02-2019-0036>
- Sugiyanto, T., Radianto, W. E. D., Efrata, T. C., & Dewi, L. (2019). Financial Literacy, Financial Attitude, and Financial Behavior of Young Pioneering Business Entrepreneurs. In *2019 International Conference on Organizational Innovation (ICOI 19)* (pp. 353–358). Atlantis Press. <https://doi.org/10.2991/icoi-19.2019.60>
- Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199–214. <https://doi.org/https://doi.org/10.1287/mksc.4.3.199>
- Thaler, R. H. (1999). Mental accounting matters. *Journal of Behavioral Decision Making*, 12(3), 183–206. [https://doi.org/https://doi.org/10.1002/\(SICI\)1099-0771\(199909\)12:3<183::AID-BDM318>3.0.CO;2-F](https://doi.org/https://doi.org/10.1002/(SICI)1099-0771(199909)12:3<183::AID-BDM318>3.0.CO;2-F)
- Van Rooij, M. C. J., Lusardi, A., & Alessie, R. J. M. (2012). Financial literacy, retirement planning and household wealth. *The Economic Journal*, 122(560), 449–478. <https://doi.org/10.1111/j.1468-0297.2012.02501.x>
- Yong, C.-C., Yew, S.-Y., & Wee, C.-K. (2018). Financial knowledge, attitude and Behavior of young working adults in Malaysia. *Institutions and Economies*, 10(4), 21–48.



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