

# The Role of Financial Attitude in The Relationship Between Financial Knowledge and Financial Behavior

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**Abstract-** This study aims to investigate the role of financial attitude and mental accounting and as mediating variables for the relationship between financial knowledge and financial behavior. This study used 400 respondents, the majority of whom were less than 25 years old and had only been in business for less than three years. The data analysis used was partial least square. The results showed that financial attitude mediates financial knowledge and financial behavior, while mental accounting does not support the relationship between financial knowledge and financial behavior. This study also found that financial attitude affects financial behavior, financial knowledge affects financial attitude, financial self-efficacy affects financial attitude, and mental accounting affects financial attitude and financial behavior. However, this study found no effect of financial knowledge on financial behavior and financial knowledge on mental accounting

**Keywords –** financial knowledge, financial behavior, financial attitude, financial self-efficacy, mental accounting

## I. INTRODUCTION

Financial knowledge is critical because it helps people doing financial planning. People should mastery personal finance since there is a growing development of banking, investment, and insurance products. It makes financial knowledge an essential factor in the welfare and sustainability of individuals and households. Financial knowledge influences attitudes and behavior so that someone can plan their finances better (Bamforth, Jebarajakirthy, & Geursen, 2017; Rai, Dua, & Yadav, 2019).

However, the relationship between financial knowledge and financial behavior is still an unfinished debate. Financial knowledge affects a person's behavior in managing their finances (Carlson, Britt, & Goff, 2015). The higher a person's financial knowledge, the better financial behavior (Danes, Huddleston-Casas, & Boyce, 1999; Perry & Morris, 2005). Furthermore, someone with sound financial knowledge will have behaviors that could exercise financial control, discipline in paying bills and commit to financial planning in the future. (Parrey & Hakeem, 2018). But other researchers found different results. Choi, Laibson, and Madrian (2005) found no difference in the financial behavior of someone who has experienced financial education and those who have never experienced it. Financial knowledge does not always affect financial behavior. The higher the financial knowledge does not make a person have better financial behavior (Mandell & Klein, 2009). Even Alhenawi (2013) confirmed that the relationship between financial knowledge and financial behavior is weak, meaning that not always someone who has financial knowledge must have good financial behavior. This finding is confirmed and reinforced by Saurabh and Nandan (2018), who found that the relationship between financial knowledge and financial behavior was weak, as indicated by the R2 result of 0.0575. This condition of inconsistency in relations also occurs in Indonesia (Armilia & Isbanah, 2019; Hendra, Yohana, & Herlina, 2019; Herdjiono & Damanik, 2016; Lianto & Elizabeth, 2017; Prihartono & Asandimitra, 2018). The differences between the two results reflect the relationship between financial knowledge and financial behavior important to continue. There appears to be an indirect relationship between financial literacy and financial behavior (Yong, Yew, & Wee, 2018). This opens up research opportunities to solve the research gap on the relationship between the two variables.

Two important aspects that influence a person's behavior are one's attitude and mentality. Attitude towards something that is believed to be accurate and thinking (mentally) will influence a particular behavior. People will find it difficult to have a positive attitude towards finance if they do not know about finances; likewise, financial behavior will usually be influenced by how individuals assess how their financial management is. So that financial attitude, which is a state of mind, opinion, and judgment about finance, will affect financial behavior (Pankow, 2003). Mental accounting will influence someone to make financial decisions and make someone think through an accounting model that impacts their ability to manage and make financial decisions. Mental accounting is influenced by financial knowledge and can affect financial management (R. H. Thaler, 1985). We use financial attitude and mental accounting as intermediate variables to resolve the research gap.

The purpose of this study was to examine the role of financial attitude and mental accounting in mediating the relationship between financial knowledge and financial behavior. This study also examines the effect of financial attitude on financial behavior, financial knowledge on financial attitude, mental accounting for financial attitude and financial behavior, the effect of financial knowledge on financial behavior, and the effect of financial knowledge on mental accounting. The attitude of a person views how important financial management can be obtained if he has financial knowledge. He is confident that he could manage his finances, which will positively affect his finances. Therefore this study will also investigate the effect of financial self-efficacy on financial attitude.

We used students in this study. Financial knowledge is fundamental because students who have financial knowledge will reduce the risk of someone experiencing financial difficulties in the future (Hira, 2002). They have to properly manage their financial matters because their time to live is separated from their parents, and they make financial decisions independently. They will also get a job immediately to require good financial understanding and management (Jacobsen, 2019). Students are mature enough to purchase various financial products, such as credit card ownership and bank savings (Ramos-Hernández, García-Santillán, & Molchanova, 2020).

## II. LITERATURE REVIEW

This study is framed by the Theory of Planned Behavior (Ajzen, 1991). This study explains the relationship between beliefs, attitudes, will or intentions, and financial behavior within this theoretical framework. A person's confidence in managing their finances through self-efficacy will increase a person's attitude in making decisions about finances, which affects their behavior in managing finances (Mandell & Klein, 2009). This theory also explains that behavioral control appears to affect how a person behaves in managing their finances. We use mental accounting, which controls and affects one's behavior in managing and making financial decisions. The theory of Planned Behavior explores the interaction between financial knowledge, financial attitude, mental accounting, financial self-efficacy to stimulate financial behavior.

### **Financial Attitude and Financial Behavior**

In the theory of planned behavior, financial attitude is an attitude that can stimulate a person's behavior in managing their finances. Financial attitudes have an essential role in determining a person's success or failure to manage finances (Dalziel & Çoşkun, 2020). The increasing financial attitude makes a person more able to think, have an opinion, and assess their finances, which is applied to finance attitudes (Rai et al., 2019). Financial attitude makes a person understand that managing finances is important. Controlling expenses, making financial plans, following these plans, managing finances for the future, and paying off obligations are characteristics of financial attitude (Potrich, Vieira, Coronel, & Bender Filho, 2015). Evidence that financial attitude affects students financial behavior can be seen from how they use credit cards. Someone who is consumptive will affect misusing a credit card (Roberts & Jones, 2001). Students who have a financial attitude will regret shopping using a credit card quite a lot compared to students who do not have a financial attitude (Hayhoe, Leach, & Turner, 1999). Borden, Lee, Serido, & Collins (2008), Abbas, Ali, Nohong, and Sobarsyah (2020), and Herdjiono and Damanik (2016) found that financial attitude affects financial behavior, so the first hypothesis is as follows::

H1= Financial Attitude affect financial behavior

### **Financial knowledge and Financial Attitude**

Financial knowledge makes someone optimistic about the importance of financial management because they realize the importance of welfare in the future (Lind et al., 2020). Financial attitude, influenced by the financial knowledge, refers to the stock of knowledge about understanding the concepts and financial products (Huston, 2010). Financial knowledge implies that a person must have the knowledge that will enable him to make financial decisions. Thus someone will be open to financial information and be able not to be impulsive in consuming. Financial knowledge is characterized by knowledge about savings, investment, debt, and the economy (van Rooij, Lusardi, & Alessie, 2012). Knowledge of the benefits of saving, investing, and financial products will influence a person's attitude regarding the importance of saving, investing, and financial products in his life. Based on this description, the second hypothesis is:

H2= Financial knowledge affect financial attitude

### **Financial knowledge and Financial Behavior**

Financial knowledge in several previous studies has been shown to affect financial behavior. The higher one's financial knowledge, the more someone can manage their finances (Carlson et al., 2015). Financial knowledge affects financial behavior in budget management, investing, and preparing emergency funds (Loke, 2015). Financial Behavior plays a vital role in influencing individuals' welfare in the household, society, nation, and the world (Mudzingiri, Muteba Mwamba, Keyser, & Poon, 2018). Internal factors that affect financial behavior are cognitive abilities and psychological factors, while external factors include social and economic conditions (Capuano & Ramsay, 2011). Financial behavior is related to how a person's behavior manages their finances in earning income and planning their expenses. Financial behavior is characterized by a person's habit of doing financial planning, seeking as much information as possible when buying products, always being punctual in paying bills, and managing finances wisely. Someone who has knowledge of finance should make better financial decisions than those without financial knowledge (Ahmad, Butt, Moazzam, & Iram, 2019; Perry & Morris, 2005). Therefore the third hypothesis is:

H3= Financial knowledge affect financial behavior

### **Financial knowledge and Mental Accounting**

Mental accounting is influenced by a person's knowledge and understanding of finance, including addressing financial decisions (Shefrin & Thaler, 1988). Financial knowledge will affect how a person categorizes the account items in his mindset. Knowledge of financial expenses, savings, and investments will form accounts in a person's mindset. It means that someone who knows finance will be able to take the right attitude regarding what is and should not be done concerning financial aspects and financial decision making. Financial knowledge helps increase the ability to control their finances so that financial knowledge has a relationship with mental accounting. The higher their financial knowledge, the more they will control their finances (Antonides, De Groot, & Van Raaij, 2011). So the fourth hypothesis is:

H4= Financial knowledge affect mental accounting

### **Financial Self Efficacy and Financial Attitude**

Financial self-efficacy makes a person believe that he can manage finances. Self-efficacy is associated with self-confidence so that someone confident to manage their finances will have the right attitude in managing finances. Motivation to manage finances is one sign that someone has financial self-efficacy. The more a person is motivated to manage finances well, the more he will have the right attitude in managing his finances. Self-efficacy, which is characterized by optimism and confidence, enables a person to overcome their financial problems. It makes someone who has financial self-efficacy believed to influence their attitudes and behavior (Lown, 2011). A person's belief will reflect how well they manage finances and are financially responsible for the future. So that the fifth hypothesis is as follows:

H5= Financial Self Efficacy affect Financial attitude

### **Mental Accounting and Financial Attitude**

The mental accounting process that categorizes the accounts in a person's mind impacts his or her attitude toward financial management. The categorization of accounts that appears, such as expenditure items, income accounts, will encourage a person to respond differently to economic transactions that occur and the accounting model (Thaler, 1999). For example, posts for shopping needs cannot be used for other needs; posts for school needs cannot be used for other needs. Mental accounting makes a person classify their finances on different accounts based on subjective criteria, such as source of funding and the intended use of income (Angle, Konidala, Ujwal, Vishnu, & Misra, 2019). It gives a person the attitude of using funds from different sources for different purposes. So that mental accounting will affect a person's attitude in making financial decisions. This description becomes the basis for the sixth hypothesis, namely:

H6= Mental Accounting affect Financial attitude

### **Mental Accounting and Financial Behavior**

Control affects a person's behavior to behave in a specific intention so that mental accounting will affect a person's financial behavior. Mental accounting will limit someone to spend (Silaya & Persulesy, 2017). The mindset category of spending items and the process of evaluating money management will affect a person's financial behavior. Mental accounting tends always to evaluate a person's financial decisions (Henderson & Peterson, 1992). When someone can evaluate their finances properly, it will increase their confidence in managing finances, such as managing finances per items that have been divided into sources and objectives. So mental accounting focuses on how a person should respond and evaluate a situation when two or more possible outcomes are related to finance. Therefore mental accounting often helps money management (Olsen, Kasper, Kogler, Muehlbacher, & Kirchler, 2019). This description underlies the seventh hypothesis, namely:

H7= Mental Accounting affect Financial behavior

From previous descriptions, the more a person has financial knowledge, the more someone has the right attitude towards finances, which will increase one's ability to manage one's finances wisely. Financial attitude appears to be a means for someone who has financial knowledge to manage and make financial decisions (Dalziel & Çoşkun, 2020; Yong et al., 2018). Furthermore, the higher one's financial knowledge, the higher a person could control himself and the more able to improve his ability to manage his finances. Someone who could manage and control their finances well will be able to make better decisions. This description forms the basis of the eighth and ninth hypotheses as follows:

H8= Financial Attitude mediates financial knowledge with financial behavior

H 9 = Mental Accounting mediates financial knowledge with financial behavior

### III. RESEARCH METHODOLOGY

This study used students who attended entrepreneurship education and already had a business in the West Surabaya region in Indonesia. This study uses primary data collected through a questionnaire with a survey method. The questionnaire was sent to young entrepreneurs using the assistance of enumerators who met the potential respondents directly. A total of 600 questionnaires were distributed. As many as 461 were collected, which means the rate of return was 77% percent. However, there were as many as 400 that were filled or 86.7 percent.

#### Measurement

Measurement of the research variables used are as follows. The variable financial knowledge adapts from van Rooij et al. (2012) and Potrich et al. (2015). Several questions cover knowledge of savings, compound interest, inflation, and investing. If the answer is correct, it is given a value of one, and if the answer is false, it is given a zero value. Financial Self-efficacy is the belief that someone can manage their finances well. We adapt the financial self-efficacy instrument from Lown (2011), which includes a response to the amount of savings, the amount of debt, the ability to meet current and future life needs, and the ability to provide an emergency fund. Financial attitude is an assessment, opinion, or state of mind towards finances applied to his attitude. We adapt the financial attitude indicator from (Potrich et al., 2015). There are several indicators regarding money financial management attitudes, namely the importance of controlling finances, planning finances, saving money, managing finances, paying off debts, and investing. In this study, mental accounting is a cognitive operational set that is used to manage, evaluate, and ensure financial activities are as planned. We adapt mental accounting from Shefrin and Thaler (1988) and Thaler (1999). They are confident in managing finances, always counting the cash needs, making financial records, making a financial budget, allocating income, evaluating spending money, and financial spending priorities. Financial behavior is a person's behavior related to financial management, adopted from Potrich et al. (2015). They are several indicators, namely comparing the price, buying goods, planning to buy goods, paying bills and debts, managing income and expenditure, controlling money, maintaining debts, and having an emergency fund. Each indicator is presented on a Likert scale, namely option 1 for Strongly Disagree and so on up to seven for the option Strongly Agree.

The analytical tool in this study using Partial Least Square (PLS) analysis. PLS is a powerful analytical method because it is not based on many assumptions and can explain latent variables' relationship (Henningsson, Sundbom, Armelius, & Erdberg, 2001; Pratama, 2016).

### IV. RESULT AND DISCUSSION

The demographic distribution of respondent data is shown in Table 1. The majority of respondents were male. On average still relatively young, at less than 20 years, and between 20 to 25 years. Javanese and Chinese ethnicities dominated the respondents' ethnicity, and the rest consisted of Sunandese, Boundary, Arabic, and others. The majority of respondents have a spending monthly to carry h 5 million. The majority of respondents have been in business for less than three years. The data in Table 1 indicate that overall, the respondents' characteristics in this study were young entrepreneurs that the majority of business less than three years.

**Table 1**  
**Demographics of respondents (n= 400)**

Demographics	Frequency	Percentage (%)
Gender		
• Male	256	64
• Female	144	36
Age (years)		
• below 20	106	27
• 20 – 25	212	53
• above 25	82	21
Ethnic		
• Javanese	130	33
• Chinese	241	60
• Others	29	7
Monthly spending (million rupiah)		
• below 5	280	70
• 5 – 10	88	22
• above 10	32	8
Duration of business (years)		
• below 3	295	74
• 3 – 5	70	18
• above 5	35	9

Descriptive analysis of each research variable is presented in table 2. The table shows that the average respondent's answer is close to six or less than six. It means that, on average, the respondents answered agree on the indicators being asked.

**Table 2. Descriptive Statistics of Research Variables**

Variable	Average	Standard Deviation
Financial knowledge	0.627	0.502
Financial attitude	6.359	1.306
Financial behavior	5.521	1.446
Financial self-efficacy	4.901	1.550
Mental accounting	5.013	1.616

The assessment of our model using PLS-SEM includes assessments of the measurement model and the structural model. The measurement model assessment includes assessments of the convergent validity, discriminant validity, and construct reliability (Hair, Hult, Ringle, & Sarstedt, 2017).

The convergent validity was assessed by loading of each item. As a threshold, the loading should be higher than 0.7 (Hair et al., 2017). Referring to Hair et al. (2017), we removed several items because their loadings were lower than 0.4. Based on a threshold, the study found the loading ranges from 0.708 (FK4) to 0.864 (FK2) (see Table 3). It is the evidence of convergent validity.

**Table 3**  
**Loading, Average Variance Extracted, and Composite Reliability of Construct**

Construct	Item Label	Loading	Average Variance Extracted	Composite Reliability
Financial Attitude			0.603	0.883
	FA1	0.811		
	FA2	0.832		
	FA3	0.755		
	FA4	0.792		

	FA5	0.683		
Financial Behavior			0.645	0.845
	FB1	0.788		
	FB2	0.818		
	FB3	0.802		
Financial Knowledge			0.624	0.767
	FK2	0.864		
	FK4	0.708		
Financial Self Efficacy			0.653	0.882
	FSE3	0.739		
	FSE4	0.839		
	FSE5	0.822		
	FSE6	0.828		
Mental Accounting			0.642	0.877
	MA1	0.790		
	MA2	0.807		
	MA3	0.838		
	MA6	0.768		

The convergent validity was also assessed by the average variance extracted of each construct. As a threshold, the average variance extracted should be higher than 0.5. Table 3 shows that the average variance extracted of each construct was higher than 0.5. Therefore, the convergent validity is confirmed. Referring to Hair et al. (2017), a loading of 0.683 (FA5) in Table 3 might not be considered for removal because the average variance extracted of its construct exceeded a threshold.

The discriminant validity was assessed by Fornell-Larcker criterion Fornell and Larcker (1981) and Hair et al. (2017). Based on the Fornell-Larcker criterion, the square root of the average variance extracted of each construct should be greater than the highest correlation between a construct and another construct. Table 4 shows that the square root of each construct's average variance ranges from 0.776 (financial attitude) to 0.808 (financial self-efficacy). They were higher than 0.398 (the highest correlation between a construct and another construct in the model). It is the evidence of discriminant validity.

**Table 4**

**The Correlation Matrix of Constructs and the Square Root of Average Variance Extracted of Each Construct**

Constructs	Financial Attitude	Financial Behavior	Financial Knowledge	Financial Efficacy	Self Mental Accounting
Financial Attitude	<b>0.776</b>				
Financial Behavior	0.387	<b>0.803</b>			
Financial Knowledge	0.137	0.068	<b>0.790</b>		
Financial Self Efficacy	0.230	0.283	0.055	<b>0.808</b>	
Mental Accounting	0.268	0.346	-0.028	0.398	<b>0.801</b>

Note: The square root of each construct's average variance is placed on the main diagonal matrix in bold.

The construct reliability was assessed by the composite reliability (Fornell & Larcker, 1981) and Hair, Hult, Ringle, and Sarstedt (2017). The composite reliability is more suitable than Cronbach's Alpha for PLS-SEM (Hair et al., 2017). As a threshold, the composite reliability should be higher than 0.7 (Hair et al., 2017). Table 3 shows that each construct's composite reliability ranges from 0.767 (financial knowledge) to 0.883 (financial attitude). It is the evidence of construct reliability.

The structural model was assessed based on hypothesis testing, which includes the path coefficient and its p-value of each hypothesis, as shown in Table 5. Based on each hypothesis's path coefficient and its p-value, H1, H2, H5, H6, and H7 were supported, whereas H3 and H4 were not significant. Also, PLS-SEM is intended to verify each endogenous construct's explained variance, measured using the coefficient of determination (R<sup>2</sup>). Overall, the model

explains 21.43 percent of the variance in financial behavior, 10.8 percent in financial attitude, and close to zero percent in mental accounting.

**Table 5**  
**Results of Hypothesis Testing**

	Hypothesis	Path coefficient	p-value	Supported
H1	Financial Attitude → Financial Behavior	0.312	0.000	Yes
H2	Financial Knowledge → Financial Attitude	0.135	0.024	Yes
H3	Financial Knowledge → Financial Behavior	0.033	0.523	No
H4	Financial Knowledge → Mental Accounting	-0.028	0.661	No
H5	Financial Self-Efficacy → Financial Attitude	0.135	0.034	Yes
H6	Mental Accounting → Financial Attitude	0.218	0.000	Yes
H7	Mental Accounting → Financial Behavior	0.263	0.000	Yes

This study followed the Baron-Kenny's procedure, including the Sobel test (Baron & Kenny, 1986) for testing the mediating effects of the proposed model, as shown in Table 6. For calculation for the Sobel test, the study used the interactive tool provided and accessed through the website <http://quantpsy.org/sobel/sobel.htm>. Table 6 shows that the direct relationship of financial knowledge to financial behavior was not statistically significant. Next, the indirect path of financial knowledge to financial behavior mediated by financial attitude was statistically significant. It shows that financial attitude fully mediated the relationship between financial knowledge and financial behavior. On the other hand, mental accounting did not mediate the relationship between financial knowledge and financial behavior. Based on the results, H8 was supported, whereas H9 was not.

**Table 6**  
**Results of Mediating Effect Test**

Path	Direct Path (1)	Indirect Path (2)	t statistic of indirect path based on Sobel test	Total Effect (1) + (2)	Mediating Effect
Financial Knowledge → Financial Attitude → Financial Behavior	0.033 <sup>ns</sup>	(0.135) (0.312) = 0.0421	2.0172*	0.0751	Full mediation
Financial Knowledge → Mental Accounting → Financial Behavior	0.033 <sup>ns</sup>	(-0.028) (0.263) = -0.0074	-0.4314 <sup>ns</sup>	-0.0404	No mediation

ns = not significant; \* significant at  $p < 0.05$ .

## Discussion

Financial Attitude has a positive effect on financial behavior. In this case, the higher one's financial attitude, the higher financial behavior will be. The right attitude about financial management impacts how a person manages his finances and how to make financial decisions. This study supports previous research (Borden et al., 2008; Dalziel & Çoşkun, 2020; Herdjiono & Damanik, 2016). A person who feels that managing finances is necessary will act carefully in planning and spending his money. When someone feels that controlling expenses is very important, when shopping, they will compare prices and check their financial condition, which means that the right attitude towards financial management will increase one's ability to manage their money.

Financial knowledge has a positive effect on financial attitude, so the higher the financial knowledge, the higher the financial attitude. One's understanding of finance, namely about savings, investment, insurance, makes a person have the right attitude towards the management and future financial goals. Someone who has good knowledge about stock investing will reason that stocks are very important to invest in for the future. Likewise, if a person understands the functions and benefits of saving, it will affect him that saving is vital as a precautionary tool. This study supports previous research conducted by Huston (2010) that a person with financial understanding will enable him to make financial decisions. This study also confirms Lind et al. (2020), who found that financial knowledge affects financial attitude. Financial knowledge does not affect financial behavior. Understanding and the level of

financial knowledge does not guarantee that someone is confident in their ability to manage finances (Herdjiono & Damanik, 2016; Lianto & Elizabeth, 2017; Prihartono & Asandimitra, 2018). Likewise, someone who has financial knowledge cannot be a benchmark for making the right financial decisions (Armilia & Isbanah, 2019; Hendra et al., 2019). In this finding, it seems that even though the respondent has a high level of knowledge, due to the relatively young age factor, it is likely that when faced with the problem of financial decision making, they have not been able to decide optimally. If the business situation is not yet established, they will find it challenging to manage their finances. It can happen because the business startup has not maximized its profits; the cash flow is still in an unpredictable condition. It can be predicted from the respondents' relatively young business age, mostly under three years (74%), still in business startups, as shown in table 2. It proves that financial knowledge does not always improve financial behavior. Relatively not high financial knowledge can also cause respondents not to manage their finances properly; this can be seen in descriptive statistical data on financial knowledge that shows financial knowledge at a moderate level. It is in line with the opinion (Chen & Volpe, 1998) who found that most students do not have high financial knowledge and impact their difficulty in managing finances. Moreover (Beal & Delpachitra, 2003) found that someone who has an educational background and is often related to financial problems does not guarantee understanding about finances, savings, investment, or insurance. It can be an indication that financial knowledge does not affect financial behavior.

Financial knowledge does not affect mental accounting. The majority of respondents are still relatively young, and it seems that they are still unable to control themselves in making purchases even though they have adequate financial knowledge. Likewise, their financial knowledge does not guarantee that they are disciplined in financial monitoring, such as carrying out financial records and financial planning discipline. Many students do not have high financial knowledge, especially in insurance, money management, including investment (Chen & Volpe, 1998). It could make financial knowledge not affect mental accounting. These two new findings contribute to the study of financial knowledge. Namely, the age of entrepreneurs and the length of time doing business seems unable to optimize financial knowledge to form financial self-efficacy and affect their mental accounting. This finding is in line with previous research, which found that there are still many students who have low financial knowledge, so that it is difficult to control and monitor their finances (Xiao, Ahn, Serido, & Shim, 2014).

Financial self-efficacy has a positive effect on financial attitude. A person who believes he will manage his finances will have the right attitude about finances. He will save and invest because saving and investing are essential for his future. So that the higher a person's self-efficacy, the higher the attitude towards financial management. This study supports several previous studies that show that financial self-efficacy affects how a person behaves towards their financial management (Farrell, Fry, & Risse, 2016; Serido, Shim, & Tang, 2013).

This study found that mental accounting affects financial attitude and financial behavior. This study succeeded in proving that mental accounting affects a person's attitude in making financial decisions. The more someone has mental accounting, the more one's attitude will be towards proper financial management. The more mental accounting affects a person's way of thinking, the more they could make correct financial decisions. Mental accounting can influence a person's behavior in choosing what investments are suitable for him (Zhang & Sussman, 2018). For example, when a person rationally thinks that keeping track of expenses is important, he will monitor his expenses every month. As a result, he will be more careful in making financial decisions, such as spending, investing, debt, and even saving. This research supports research (Silaya & Persulesy, 2017). This study supports the findings (Henderson & Peterson, 1992) that mental accounting affects how people behave towards their finances. One of the essential aspects of mental accounting is self-control. The tighter a person's self-control, the more he will control his finances well. He can also refrain from buying unnecessary items, including other expenses that are not necessary (financial behavior).

Financial attitude fully mediates the relationship between financial knowledge and financial behavior. This study found that the higher the financial knowledge will affect the financial attitude, and the higher the financial attitude will impact the higher financial behavior. This study supports several previous studies. Dalziel and Çoşkun (2020) found that financial attitude mediates the relationship between financial knowledge and financial behavior. It means that financial attitude intervention strengthens this relationship. Yong et al. (2018) found that financial knowledge cannot directly influence a person's financial behavior but must first improve his financial attitude and affect financial behavior.

Mental accounting does not mediate the relationship between financial knowledge and financial behavior. Mental accounting is influenced by a person's knowledge and understanding of finances (Shefrin & Thaler, 1988), although

this study did not find this relationship. This study found that financial knowledge could not increase its ability to analyze financial decisions. Then, it turned out that mental accounting could not affect financial management behavior. It means that this study found that the relationship between financial knowledge and financial behavior cannot be intervened by mental accounting. As in previous studies, it appears that even though the respondents own a business, in the context of being a student, they still tend to find it difficult to manage their finances. It, of course, affects his ability to manage finances.

## V. CONCLUSION

This study uses data that can be processed by 400 respondents, most of whom are less than 25 years old and have only been in business for less than three years. This study contributes that someone who has financial knowledge has better financial behavior if he has the right attitude towards finances than his ability to analyze financial decisions and control himself. The financial knowledge possessed by students who have a business is not always related to their ability to manage finances and their ability to analyze financial decisions. This research proves that the correct financial attitude is influenced by financial knowledge. Individuals who have financial knowledge will have the right financial attitude. For example, financial knowledge about investing will make them invest because they understand that investing is essential.

Furthermore, the correct financial attitude is influenced by the belief that he can manage finances well. The more a person believes he could manage finances well, the more he will understand the importance of financial management both now and in the future. He will be more confident that controlling expenses, making financial plans, saving, and other financial activities will positively impact his future. A further contribution from this study is how a person thinks using the concept of mental accounting affects one's attitude about the importance of financial management. The more one thinks to use mental accounting, and then he will increasingly have the attitude that it is important to manage finances now and in the future. Mental accounting will shape one's attitude about the importance of finances.

This study's limitation is that it does not separate financial knowledge into subjective and objective financial knowledge. It will certainly open up new opportunities for further research, namely investigating financial knowledge's relationship and objective financial knowledge with financial behavior. Furthermore, it can also be further investigated the role of mental accounting in mediating subjective financial knowledge and objective financial knowledge on financial behavior.

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## REFERENCES

- [1] Bamforth, J., Jebarajakirthy, C., & Geursen, G. (2017). Undergraduates' responses to factors affecting their money management behaviour: some new insights from a qualitative study. *Young Consumers*, 18(3), 290-311. doi:10.1108/yc-11-2016-00645
- [2] Rai, K., Dua, S., & Yadav, M. (2019). Association of Financial Attitude, Financial Behaviour and Financial Knowledge Towards Financial Literacy: A Structural Equation Modeling Approach. *FIIB Business Review*, 8(1), 51-60. doi:10.1177/2319714519826651
- [3] Carlson, M. B., Britt, S. L., & Goff, B. N. (2015). Factors associated with a composite measure of financial behavior among soldiers. *Journal of Financial Counseling and Planning*, 26(1), 30-42.
- [4] Danes, S. M., Huddleston-Casas, C., & Boyce, L. (1999). Financial planning curriculum for teens: Impact evaluation. *Journal of Financial Counseling and Planning*, 10(1), 26.
- [5] Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self - perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, 39(2), 299-313. doi:10.1111/j.1745-6606.2005.00016.x
- [6] Parrey, S. H., & Hakeem, I. A. (2018). Financial knowledge and financial behaviour of agri-allied entrepreneurs : A mediational study of cultural values. *Journal of management & research. Sankalpa*, 8(2), 1-11.
- [7] Choi, J. J., Laibson, D. I., & Madrian, B. C. (2005). Are empowerment and education enough? Underdiversification in 401 (k) plans. *Brookings Papers on Economic Activity*, 2, 151-213. doi:10.1353/eca.2006.0002
- [8] Mandell, L., & Klein, L. S. (2009). The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning*, 20(1), 54-64.
- [9] Alhenawi, Y. (2013). Financial literacy of US households: Knowledge vs. long-term financial planning. *Financial services review*, 22, 211-244.

- [10] Saurabh, K., & 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
- [11] Armilia, N., & Isbanah, Y. (2019). Faktor Yang Mempengaruhi Kepuasan Keuangan Pengguna Financial Technology Di Surabaya. *Jurnal Ilmu Manajemen*, 8(1), 39–50.
- [12] Hendra, W., Yohana, I. P., & Herlina, B. (2019). Keterkaitan Pengetahuan dan Perencanaan Keuangan Terhadap Perilaku Karyawan Pria. *Jurnal Ekonomi*, 24(2), 176–192. doi:10.24912/je.v24i2.567
- [13] Herdjiono, I., & Damanik, L. A. (2016). Pengaruh financial attitude, financial knowledge, parental income terhadap financial management behavior. *Jurnal Manajemen Teori dan Terapan. Journal of Theory and Applied Management*, 9(3), 226-232.
- [14] Lianto, R., & Elizabeth, S. M. (2017). Analisis Pengaruh Financial Attitude, Financial Knowledge, Income Terhadap Financial Behavior di Kalangan Ibu Rumah Tangga Palembang (Studi Kasus Kecamatan Ilir Timur I). *Journal of Business and Banking*, 3(2), 1-12.
- [15] Prihartono, M. R. D., & Asandimitra, N. (2018). Analysis Factors Influencing Financial Management Behaviour. *International Journal of Academic Research in Business and Social Sciences*, 8(8), 308–326. doi:10.6007/ijarbs/v8-i8/4471
- [16] Yong, C. C., Yew, S. Y., & Wee, C. K. (2018). Financial knowledge, attitude and behaviour of young working adults in Malaysia. *Institutions and Economies*, 10(4), 21-48.
- [17] Pankow, D. (2003). Financial values, attitudes and goals. (N. D. S. University, Ed.). *Family Economic Specialist*, 1-4.
- [18] Thaler, R. H. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199-214.
- [19] Hira, T. K. (2002). Current financial environment and financial practices: Implications for financial health. *Journal of Family and Consumer Sciences*, 94(1), 1-4.
- [20] Jacobsen, C., & Correia, J. (). (2019). Analysis of Financial Literacy in a College Population. *Journal of Higher Education Theory and Practice*, 19(4), 11-19.
- [21] Ramos-Hernández, J. J., García-Santillán, A., & Molchanova, V. (2020). Financial Literacy Level on College Students: A Comparative Descriptive Analysis between Mexico and Colombia. *European Journal of Contemporary Education*, 9(1), 126-144.
- [22] Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- [23] Dalziel, N., & Çoşkun, A. (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. doi:10.20525/ijrbs.v9i2.647
- [24] 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.
- [25] Roberts, J. A., & Jones, E. (2001). Money Attitudes, Credit Card Use, and Compulsive Buying Among American College Students. *Journal of Consumer Affairs*, 35(2), 213-240. doi:10.1111/j.1745-6606.2001.tb00111.x
- [26] Hayhoe, C. R., Leach, L., & Turner, P. R. (1999). Discriminating the number of credit cards held by college students using credit and money attitudes. *Journal of Economic Psychology*, 20(6), 643-656. doi:10.1016/S0167-4870(99)00028-8
- [27] Abbas, D., Ali, M., Nohong, M., & Sobarsyah, M. (2020). Predicting the Financial Behavior of the Religious Organization Board in Indonesia. *The Journal of Asian Finance, Economics and Business*, 7(12), 1159-1166. doi:10.13106/jafeb.2020.vol7.no12.1159
- [28] 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*. doi:10.1007/s10834-020-09678-9
- [29] Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296-316.
- [30] 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. doi:10.1111/j.1468-0297.2012.02501.x
- [31] Loke, Y. J. (2015). Financial Knowledge and Behaviour of Working Adults in Malaysia. *Margin: The Journal of Applied Economic Research*, 9(1), 18-38. doi:10.1177/0973801014557392
- [32] Mudzingiri, C., Muteba Mwamba, J. W., Keyser, J. N., & Poon, W. C. (2018). Financial behavior, confidence, risk preferences and financial literacy of university students. *Cogent Economics & Finance*, 6(1). doi:10.1080/23322039.2018.1512366
- [33] Capuano, A., & Ramsay, I. (2011). What causes suboptimal financial behaviour. An exploration of financial literacy, social influences and behavioural economics. *Legal Studies Research Paper*. Melbourne, Australia.
- [34] Ahmad, A., Butt, B. S., Moazzam, & Iram, S. (2019). Drivers Influencing Financial Behavior among Management Students in Narowal. *International Journal of Academic Research in Business and Social Sciences*, 9(2). doi:10.6007/IJARBS/v9-i2/5602
- [35] Shefrin, H. M., & Thaler, R. H. (1988). The behavioral life - cycle hypothesis. *Economic inquiry*, 26(4), 609-643.
- [36] Antonides, G., De Groot, I. M., & Van Raaij, W. F. (2011). Mental budgeting and the management of household finance. *Journal of Economic Psychology*, 32(4), 546-555.
- [37] Lown, J. M. (2011). Development and validation of a financial self-efficacy scale. *Journal of Financial Counseling and Planning*, 22(2), 54-64.
- [38] Thaler. (1999). Mental Accounting Matters. *Journal of Behavioral Decision Making*, 12, 183-206.
- [39] Angle, P., Konidala, S., Ujwal, D., Vishnu, B., & Misra, S. (2019). Impact of Mental Accounting Bias on Stock Market Integration. *Journal of Xi'an University of Architecture & Technology*, 11(12), 283-304.
- [40] Silaya, M. A., & Persuleussy, G. (2017). Mental Accounting dan Faktor Demografi: Fenomena Penggunaan Kartu Kredit pada Pegawai Bank Danamon Cabang Ambon. *Jurnal Soso-Q*, 5(1), 57-67. doi:10.30598/sosoq.v5i1.112
- [41] Henderson, P. W., & Peterson, R. A. (1992). Mental accounting and categorization. *Organizational behavior and human decision processes*, 51(1), 92–117. doi:10.1016/0749-5978(92)90006-S
- [42] Olsen, J., Kasper, M., Kogler, C., Muehlbacher, S., & Kirchler, E. (2019). Mental accounting of income tax and value added tax among self-employed business owners. *Journal of Economic Psychology*, 70, 125-139. doi:10.1016/j.joep.2018.12.007

- [43] Henningsson, M., Sundbom, E., Armelius, B. Å., & Erdberg, P. (2001). PLS model building: a multivariate approach to personality test data. *Scandinavian journal of psychology*, 42(5), 399-409. doi:10.1111/1467-9450.00252
- [44] Pratama, T. (2016). Pengaruh Gaya Kepemimpinan Terhadap Kinerja Pegawai Pada Badan Perencanaan, Penelitian Dan Pembangunan Daerah (Bappeda) Kabupaten Morowali Dengan Motivasi Kerja Sebagai Variabel Intervening. *Katalogis*, 4(8), 54-62.
- [45] Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*: Sage Publications.
- [46] Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382-388. doi:10.1177/002224378101800313
- [47] Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(5), 1173-1182. doi:10.1037/0022-3514.51.6.1173.
- [48] 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.
- [49] Chen, H., & Volpe, R. P. (1998). An Analysis of Personal Financial Literacy Among College Students. *Financial services review*, 7(2), 107-128.
- [50] Beal, D., & Delpachitra, S. (2003). Financial literacy among Australian university students. *journal of applied economics and policy*, 22(1), 65-78.
- [51] Xiao, J. J., Ahn, S. Y., Serido, J., & Shim, S. (2014). Earlier financial literacy and later financial behaviour of college students. *International Journal of Consumer Studies*, 38(6), 593-601.
- [52] Farrell, L., Fry, T. R. L., & Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance behaviour. *Journal of Economic Psychology*, 54, 85-99. doi:10.1016/j.joep.2015.07.00
- [53] 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. doi:10.1177/0165025413479476
- [54] Zhang, C. Y., & Sussman, A. B. (2018). Perspectives on mental accounting: An exploration of budgeting and investing. *Financial Planning Review*, 1((1-2)), 1-10. doi:10.1002/cfp2.1011