

THE ROLES OF FINANCIAL SELF EFFICACY AND MENTAL ACCOUNTING IN INCREASING FINANCIAL MOTIVATION AND BEHAVIOR

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Abstract:

The aim of this research is to test the influence of mental accounting and motivation to financial behavior and test financial self-efficacy in mediating the relationship between mental accounting and financial behavior. This research uses survey method by sending questionnaires to young entrepreneurs starting a business. The result of the research shows that mental accounting, financial self-efficacy, and motivation influence financial behavior. This research discovers that a person's confidence in their ability in managing finance depend on mental accounting mindset. Financial self-efficacy is also an important variable for encouraging the increasing of a person's ability in planning and managing finance.

Keywords: *Mental Accounting, Financial Self-efficacy, Motivation, Financial Attitude, Entrepreneur*

1. Introduction [Times New Roman 12 bold]

Financial literacy to this day is still an interesting and important issue to be researched in advanced countries, developing countries, and underdeveloping countries. Financial literacy has impact on financial inclusion, in which financial inclusion is one of the important factors in economic development. The development of financial technology makes financial literacy more important which has to be mastered by everyone. The more financial literacy a person has, the more financial inclusion will increase by being able to use financial technology well. On the contrary, a person with low financial literacy but who is aware of financial technology will be dangerous because their impulsive nature will render the person unable to manage their finance well.

One of the important aspects in financial literacy is financial attitude. Good financial attitude will give a person a chance to manage finance and prepare their finance for the future well. Several researches have discovered that financial literacy influences financial attitude (Ameer & Khan, 2020; Grohmann, 2018). The higher financial literacy is, the better financial behavior is so that low financial behavior tends to make wrong financial decision. Good financial literacy subjectively and objectively influences a person so that financial literacy is the main predictor in forming financial behavior. Some indicators of healthy financial behavior are shown by several factors, such as being able to do financial planning activities, manage finance effectively and

efficiently, and control finance effectively. Because of this, financial attitude reflects someone's ability in manage financial planning and expense.

Financial planning and expense are related to a person's personal budget. People will often plan expense from certain reception so they have to make decisions about fund which will be used and spent. Decision making about fund source and use are closely related to mental accounting. Mental accounting is a process of how someone categorizes fund in their mind. Mental accounting will categorize certain source and expense so certain expense will be taken from certain source. This will obviously violate the concept that fund is equal, meaning any expense can actually be taken from any fund. Therefore, the influence of mental accounting to financial attitude is still unable to be firmly concluded. The research by W.E.D. Radianto, Salim, Christian, and Dewi (2022) discovered the relationship between mental accounting and financial attitude. However, according to Zhang and Sussman (2018), mental accounting are not always capable of influencing someone's behavior. The research about financial attitude determinant has been researched by involving financial literacy, financial attitude, and financial knowledge variables. However, the research about the relationship between mental accounting and financial behavior has not been done much especially in the context of young entrepreneurs.

This research aims to develop the model of the relationship between mental accounting and financial behavior. We add financial self-efficacy variable as mediator variable to try resolving research gap in which there is no definite relationship between mental accounting and financial behavior yet. The higher self-efficacy, which is someone's confidence of being capable of manage their finance well, is, their motivation to manage finance well will increase, which will encourage them to be able to plan and manage finance healthily. Therefore, we research the influence of financial self-efficacy to financial motivation and the influence of financial motivation to financial behavior.

In this research, we used young entrepreneurs starting a business as research samples. We saw that young entrepreneurs starting a business are obviously always confronted with the problem of using fund. They have to be able to manage finance well for personal needs and business needs. Because they are still relatively young and educated, they seem to have belief that they can manage finance correctly. Therefore, we conclude that our samples are in accordance with this research.

Self Efficacy

Someone with high self-efficacy is someone with high confidence with their ability in solving problems or tasks given to them. They are very sure that they can reach their goals because they believe in their ability. Self-efficacy is an important variable and has been proven to influence someone to have very good performance in multiple aspects such as jobs, academy, hobbies, business, and other aspects. They will try to do their best to solve encountered problems in order to reach goals which have been set. Therefore, self-efficacy will encourage someone's motivation and performance (Lunenburg, 2011). On the other hand, financial self-efficacy is someone's belief in themselves that they have capability in managing financial decision and are able to make efficient decisions.

Mental Accounting and Financial Self-Efficacy

Mental accounting is the mindset of someone who tends to code, categorize, and evaluate economic decisions by grouping assets into several categories in the concept of mental accounts in their mind (Thaler, 1999). Mental accounting makes someone do irrational things because dividing fund/money into several categories, such as certain expense, has to be from certain sources of income which causes money to be unequal or unable to be exchanged, even though money is equal, meaning any expense can use sources from anywhere and does not always have to be from certain sources. On the other hand, mental accounting can become a tool of financial control. Mental accounting renders someone able to do budgeting and be careful in making expenses or preventing extravagance, so mental accounting is one of the tools to monitor and control personal finance. The more someone thinks with mental accounting way, they can manage finance more efficiently and effectively because finance can be managed and monitored. Therefore, mental accounting mindset will render an individual able to manage finance better, the more an individual is exposed with mental accounting mindset, they will believe more with themselves that they are able to manage finance better. It means the more an individual has mental accounting mindset, the higher financial self-efficacy is. That argument becomes the first hypothesis base below:

H1= Mental Accounting influences Financial Self-Efficacy.

Financial Self-Efficacy and Financial Behavior

Financial self-efficacy reflects the level of someone's confidence in their ability to manage finance. The higher financial self-efficacy is, the better someone's behavior is. Some researches discovered that self-efficacy influences financial behavior (Faique et al., 2017; W.E.D. Radianto, Kristama, & Salim, 2021). Financial self-efficacy encourages an individual to be able to plan, budget, manage, control, search, and keep owned daily financial funds. Financial self-efficacy is related to someone's financial responsibility in managing finance. This argument becomes the second hypothesis base below:

H2= Financial Self-Efficacy influences Financial Behavior.

Financial Self-Efficacy and Motivation

The higher financial self-efficacy is, the higher someone's confidence towards themselves that they are able to make financial decisions and manage finance efficiently is. Someone with high financial self-efficacy has higher level of motivation to reach their goals and their financial responsibility, which means their financial management behavior will be better as well (Ulumudiniati & Haryono, 2022). The research conducted by Qamar, Khemta, and Jamil (2016) discovered that financial self-efficacy is a variable which can also influence someone's financial management behavior.

H3= Financial Self-Efficacy influences Motivation.

Motivation and Financial Behavior

Motivation is will and desire which strongly affect an individual's desire so they encourage them to do certain actions and behaviors. In the context of financial motivation, someone has strong motivation and desire to be prosperous in the future by encouraging them to have correct behaviors in managing finance. Therefore, financial motivation will encourage an individual to increase good financial management. With the motivation to have present and future welfare, an individual will have rational behaviors such as in making investment decisions, planning pension, and being able to control finance well. So, it can be said that financial motivation aims to form good financial attitude (Tambun, Sitorus, & Nurwanti, 2022). The result of the research showed that motivation makes changes in positive financial attitude for controlling expense and happening impulsive buying (Rowley, Lown, & Piercy, 2012).

H4= Motivation influences Financial Behavior.

Then, we speculated that the more someone is influenced by mental accounting mindset, the more financial self-efficacy will increase, that is someone's belief in their ability to manage finance well. Next, financial self-efficacy will influence someone's ability in managing and making financial decisions, also known as financial behavior. So, we conclude that financial self-efficacy mediates the relationship between mental accounting and financial behavior. The fifth hypothesis is below:

H5= Financial self-efficacy mediates the relationship between mental accounting and financial behavior.

The model of this research can be depicted like this:

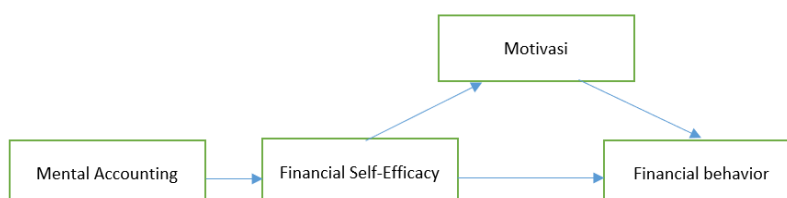


Figure 1. Research Model

2. Research Method

This research aims to develop the model of the relationship between mental accounting and financial behavior. The method of data gathering used questionnaire spreading. The population in this research was young entrepreneurs starting a business for at least 2 years. We spread 300

questionnaires and the returned questionnaires which could be processed were 259 questionnaires (the level of the returning was 86%). We adapted and developed the variables of research operational which were summarized in the table below:

Table 1. Definition of Research Operational Variable

Variable	Operational Definition	Source
Financial Behavior	A person's behavior is related to financial management.	(Potrich, Vieira, Coronel, & Bender Filho, 2015)
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 and Thaler (1988), Thaler (1985)
Financial Self-efficacy	Efficacy: A person's confidence in managing their finances well	(Lown, 2011)
Motivation	Dominant factors influence someone in planning finance	(Sina, 2014)

In measuring those four variables, we used Likert scale. Data analysis used Path Analysis.

3. Results and Discussion

3.1. Results

This research succeeded in getting 259 respondent data which had profiles below:

Table 2. Respondent Profiles

No	Category	Description	Quantity	Percentage (%)
1	Age	< 20 years old	24	9
		20-23 years old	201	78
		> 23 years old	34	13
2	Gender	Female	159	61
		Male	100	39
3	Ethnic	Java	87	36
		Tionghoa	149	58
		Others (Sunda, Batak, etc.)	23	6
4	Monthly expense	< Rp 5.000.000	151	58
		Rp 5.000.000-10.000.000	71	27
		> Rp 10.000.000	37	15

From Table 2, it can be seen that the respondents aged 20-23 dominated this research sample. Next, Tionghoa ethnic occupied the most sample (58%), followed by Java ethnic (36%) and other ethnics like Sunda, Batak, Arab, etc. as much as 6%. The most monthly expense was under Rp 5.000.000 as much as 58%, between Rp 5.000.000 and Rp 10.000.000 as much as 27%, and the rest above Rp 10.000.000 as much as 15%. So, the respondent profiles of this research

were respondents aged 20-23, female, and from Tionghoa ethnic with expense below Rp 5.000.000. From those profiles, it can be seen that the respondents of this research were young entrepreneurs starting a business.

Data Analysis

We did convergent validity and discriminant validity tests, and then did reliability tests which continued with model suitability and research hypothesis tests.

Table 3. Validity Test

Variable	Indicator	Loading Factor	AVE	CR
Mental Accounting	A1	0,691	0,583	0,845
	A2	0,869		
	A3	0,877		
	A6	0,575		
Financial Self Efficacy	FE3	0,596	0,525	0,814
	FE4	0,776		
	FE5	0,761		
	FE6	0,750		
Motivation	M1	0,703	0,487	0,791
	M2	0,668		
	M3	0,692		
	M4	0,726		
Financial Behavior	C3	0,590	0,416	0,780
	C4	0,581		
	C5	0,663		
	C6	0,713		
	C7	0,668		

From the result of the convergent validity test, it can be concluded that the latent constructions of Mental Accounting, Financial Self-efficacy, motivation, and financial management behavior fulfil the AVE >0,50 criteria, whereas the result of discriminant validity test can be seen from this table:

Table 4. Discriminant Validity

	Mental Accounting	Fin. Self-Efficacy	Motivation	Fin. Behavior
Mental Accounting	0,764	0,440	0,373	0,656
Fin. Self-Efficacy	0,440	0,724	0,314	0,657
Motivation	0,373	0,314	0,698	0,352
Fin. Behavior	0,656	0,657	0,352	0,645

Based on the result of discriminant validity test in Table 4, it can be concluded that the overall variables in this research have higher AVE square root values than other construct correlations. The values of each variable in this research have had good discriminant validity.

The result of reliability test can be seen from the value of CR (Construct Reliability) in Table 3. So, the latent constructs which have high reliability values were Mental Accounting, Financial Self-efficacy, motivation, and financial management behavior above 0,70 showing good reliability.

Table 5 below provides the analysis of research model suitability.

Table 5. The Result of the Analysis of Model Suitability

Type of Goodness of Fit	Goodness of Fit	Expected Value	Result	Evaluation
Absolute fit measures	Chi-square (χ^2)	Expected to be small	469,987	Good fit
	Probability	$\geq 0,05$	0,000	Marginal fit
	RMSEA	$\leq 0,08$	0,111	Poor fit
	GFI	$\geq 0,90$	0,822	Marginal fit
Incremental fit measures	AGFI	$\geq 0,90$	0,759	Marginal fit
	CFI	$\geq 0,90$	0,815	Marginal fit
	TLI	$\geq 0,90$	0,778	Marginal fit
Parsimony fit measures	CMIN/DF	$\leq 5,00$	4,159	Good fit

Marginal Fit is the condition of measurement model suitability under the criteria of both *absolute fit* and *incremental fit* measurement, but can still be continued in the further analysis because it is near *good fit* measurement criteria. Furthermore, Hair Jr., Sarstedt, Hopkins, and Kuppelwieser (2014) confirmed that a model is feasible if at least one of the model suitability testings is fulfilled. Therefore, based on the overall *goodness of fit* measurement from this research model, it can be concluded that the suggested model can be accepted with enough appropriateness.

Hypothesis testing

Hypothesis testing is done after the esteemed structural model *goodness of fit* criteria can be fulfilled. The relationship of constructs in hypothesis is shown by *regression weights* value. A hypothesis is accepted if the level of significance of the relationship of variables in *regression weight* from *estimate maximum likelihood* has value of $p < 0,05$ (Cooper and Schindler, 2014). A hypothesis is supported if the influence of a construct to another construct results in estimated parameter value which is critical value higher than 1,9 at the significant level of 0,05.

Table 6. The Result of Hypothesis Testing

Regression Weight	Estimate	S.E.	C.R.	P	Note
Mental accounting → Financial self-efficacy	0,354	0,046	6,077	,000	Significant
Financial self-efficacy → Financial behavior	0,398	0,078	7,082	,000	Significant
Financial self efficacy → motivation	0,192	0,047	3,147	,002	Significant
Motivation → Financial behavior	0,174	0,103	3,099	,002	Significant
Mental Accounting → Financial Self Efficacy → Financial Behavior	From the result of calculation, mediation factor shows that t count is higher than t table, that is $4,230 > 1,96$				Mediating significant

From Table 6, it can be concluded all hypotheses 1 until 5 are accepted, that are: Mental accounting influences financial self-efficacy (H1), financial self-efficacy influences motivation and financial behavior (H2 and H3), motivation influences financial behavior (H4), and financial behavior mediates the relationship between mental accounting and financial behavior (H5).

3.2.Discussion

Mental accounting influences financial self-efficacy. Mental accounting is the mindset of someone in seeing transaction in their mindset. The mindset of mental accounting will make someone manage their finance through financial controlling. The more capable someone is in controlling their finance, the more confident someone is in managing their finance. This research discovered positive relationship between mental accounting and financial self-efficacy, meaning the more someone is influenced by mental accounting mindset, the more confident someone is in managing their finance. This research supports previous researches (W.E.D. Radianto, Efrata, & Dewi, 2020; W.E.D. Radianto et al., 2022).

Financial Self-efficacy influences financial behavior. This research discovered that there is significant positive influence between financial self-efficacy and financial behavior, meaning the higher financial self-efficacy is, the higher financial behavior is. Someone's confidence to be able to manage finance will encourage them to be able to plan and manage finance well. This research supports researches by W.E.D. Radianto et al. (2020), Amagir, Wilschut, and Groot (2018), and Putri and Pamungkas (2019).

Financial self-efficacy influences motivation. This research discovered that the higher financial self-efficacy is, the higher motivation to have financial well-being is. Someone with confidence to be able to plan and manage finance of course has hope that their future will be prosperous financially. Therefore, that confidence encourages them to have motivation to have present and future financial welfare. This research is similar to the research by Lown (2011) who stated that financial self-efficacy is related to motivation. This research supports previous researches (Asebedo, Seay, Archuleta, & Brase, 2019; Kautsar, Asandimitra, & Aji, 2018).

Motivation influences financial behavior. Motivation to live well will encourage someone to plan and manage finance well. Motivation is a trigger for someone to be able to change their life, which in this context is motivation to live not lacking financially. When someone has motivation to live well, they will realize that the purpose will not be achieved if their finance is not planned and managed optimally. This research supports previous researches (Hengo, Ndoen, & Amtiran, 2021; Rosalina, Rahim, Husni, & Alfarisi, 2021).

Financial self-efficacy mediates the relationship between mental accounting and financial behavior. Mental accounting does not always influence someone's financial behavior. However, someone with mental accounting mindset will tend to be more able to plan their finance, which is making a budget, sorting income and expense, and monitoring their expense. That said, those things do not guarantee that someone's mental accounting encourages them to plan and manage their finance well. This research discovered that financial self-efficacy can mediate the relationship between mental accounting and financial behavior, meaning someone with mental accounting mindset will influence financial behavior through their confidence to be able to manage their finance well. Financial self-efficacy is important to ensure that someone can plan and manage their finance well.

4. Conclusion

This research discovered that mental accounting, financial self-efficacy, and motivation are determinants of financial behavior. Financial behavior is influenced by the mindset of mental accounting, in this context mental accounting allows every individual to monitor and evaluate their financial behavior. This research discovered that motivation to have financial welfare in the future demands someone to be able to plan their finance well. Furthermore, someone will be able to manage finance well if they are confidently able to plan and manage their finance. Likewise, motivation which encourages someone to be able to plan and manage finance well is just as important. The new discovery in this research was the roles of financial self-efficacy in mediating the relationship between mental accounting and financial behavior, meaning if mental accounting influences financial behavior, they have to go through financial self-efficacy.

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