International Journal of Economics, Business and Accounting Research (IJEBAR)
Peer Reviewed – International Journal
Vol-7, Issue-4, 2023 (IJEBAR)
E-ISSN: 2614-1280 P-ISSN 2622-4771
https://jurnal.stie-aas.ac.id/index.php/IJEBAR

FINANCIAL KNOWLEDGE AND FINANCIAL BEHAVIOR: THE ROLE OF SELF-EFFICACY AND FINANCIAL ATTITUDES

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Abstract: Young people are vulnerable people with various problems, especially financial problems. To overcome financial problems, individuals must understand well about financial knowledge, self-efficacy, financial attitudes and also financial behavior. Researchers wanted to analyze the role of self-efficacy and financial attitudes on the effect of financial knowledge on financial behavior. The respondents of this study were generation Z in Yogyakarta with a sample of 80 respondents. Data from respondents were processed with the Structural Equation Model (SEM) with the Smart PLS 4.0 statistical tool. The results of this study show that financial knowledge has an effect on financial behavior, self-efficacy mediates the effect of financial knowledge on financial behavior, financial attitudes mediate the effect of financial knowledge on financial behavior.

Keywords: *Financial Knowledge; Self Efficacy; Financial Attitude; Financial Behavior.*

Submitted: 2023-09-07; Revised: 2023-11-18; Accepted: 2023-11-23

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1. Introduction

The existence of the industrial revolution 4.0 encourages everyone to be smart in managing finances and responsible for personal finances (Xu et al., 2018). Individuals need knowledge and skills in using money in order to make a profit (Nababan, 2012). According to the theory of planned behavior, behavior is an action that can be observed as well as indicate how a person acts in a given situation (Schmeiser & Seligman, 2013). Financial behavior becomes important to evaluate individual decision-making processes that can increase financial resilience in crisis situations (Xiao et al., 2015). To develop good financial behavior, everyone must understand financial concepts well so that they can take financial actions for their future (Puspita & Isnalita, 2019).

Financial behavior is influenced by financial knowledge (Allgood & Walstad, 2016; Deenanath et al.,2019). Financial knowledge will shape an individual's decisions about financial matters, so an individual's financial behavior is based on that knowledge (Deenanath et al.,2019). Financial knowledge is when a person knows about finance (Huang et al., 2014). Delavande et al., (2008) explained financial knowledge is the ability to manage income, expenses, and savings effectively. Financial knowledge is not only composed of objective financial knowledge but also the level of subjective financial knowledge (Hadar et al.,2013).

Self-confidence is an important component of self-efficacy, which drives individuals to make decisions (Flores, 2014). Rothwell et al. (2016) and Mindra & Moya (2017) in their research proved that financial knowledge has an effect on self-efficacy. Qamar et al. (2016) and Radianto et al. (2022) also found the effect of self-efficacy on financial behavior.

Qamar et al. (2016) and Radianto et al. (2022) also found the effect of self-efficacy on financial behavior. Financial knowledge also affects an individual's financial attitude (Kadoya & Khan, 2020; Noh, 2022). According to Garber and Koyama (2016), individuals who have financial knowledge will support financial attitudes. Susan and Djajadikerta (2017) and Rai et al. (2019) prove that financial attitude affects a person's financial behavior, and it can be concluded that a good financial attitude will support financial behavior.

Individual financial behavior is influenced by a financial perspective, which is a mediating factor (Shim et al., 2010). Financial behavior can change based on financial knowledge in individuals (Jorgensen & Savla, 2010). The results of research by Singh et al. (2019) prove that self-efficacy mediates the influence of financial knowledge on financial behavior. Financial attitudes also mediate the influence of financial knowledge on financial behavior (Çoşkun & Dalziel, 2020). Previous research has shown that financial attitudes and self-efficacy are able to mediate the influence of financial knowledge on financial behavior, but the research has not been consistent. Researchers want to reexamine the research model more deeply, especially generation Z in Yogyakarta.

2. Literature Review & Hypothesis Development

2.1. Financial Knowledge

Financial knowledge is mastery of various aspects of finance, including financial tools and financial skills (Andrew & Linawati, 2014). Hilgert et al. (2003) explain that lack of financial knowledge will prevent a person from managing money wisely, including in investment, consumption, and saving activities. Whereas people with good financial knowledge will have a greater perspective in making decisions in a reasonable and responsible way (Hilgert et al., 2003).

2.2. Self-Efficacy

Self-efficacy is the belief of individuals in the capacity to carry out tasks or act to achieve certain goals (Bandura, 1986). Self-efficacy is also the ability of individuals to know their competence and capacity to carry out tasks, achieve goals, or produce something (Baron et al., 2006).

2.3. Financial Attitude

Financial attitude is the use of financial principles to generate and maintain value through resource management and wise decision making (Rajna et al., 2011). Financial attitudes according Mien & Thao (2015) will affect how individuals spend, save, and dispose of money.

2.4. Financial Behavior

Financial management behavior is related to the effectiveness of fund management, where the flow of funds must be directed in accordance with a predetermined plan (Humaira & Sagoro, 2018). Financial behavior includes actions involving money, savings, credit, and cash (Xiao et al., 2015). Puspita and Isnalita (2019) argue that financial behavior can develop well if individuals have good financial knowledge.

2.5. Effect Of Financial Knowledge on Financial Behavior

Financial knowledge possessed by individuals can support individual financial behavior in facilitating financial transactions (Ajzen, 1991). Sina (2015) asserts that financial knowledge will help individuals understand the important points of money management. An individual's financial knowledge can be enhanced through education that will make decision making easier. individuals with good financial behavior because they have a lot of financial knowledge (Ersha et al., 2016). The research of Shih and Ke (2014) and Çera et al. (2021) proves that financial knowledge has a positive influence on financial behavior. Based on the description above, the first hypothesis in this study is:

H_1: Financial Knowledge Has an Effect on Financial Behavior

2.6. Effect Of Financial Knowledge on Self Efficacy

Cognitive social theory explains how an individual's knowledge can contribute to the process of self-control (Bandura, 1986). Individuals who have the capacity of financial knowledge can support self-efficacy in their lives. This is based on the opinion of Bandura (1986) which explains individuals with knowledge capacity will have the mental strength, spirit, and resources needed to carry out these self-efficacy activities. Research by Amagir et al. (2018) and Mulasi & Mathew (2021) proves that financial knowledge can increase self-efficacy. Good financial knowledge allows individuals to increase self-efficacy. Based on the description above, the second hypothesis in this study is:

H_2: Financial Knowledge Has an Effect on Self Efficacy

2.7. Effect Of Self Efficacy On Financial behavior

Self-efficacy plays an important role in shaping an individual's thoughts, beliefs, feelings, and behaviors (Bandura 1986). High self-efficacy promotes calmness in completing challenging tasks and activities (Mulki et al., 2008). Self-efficacy can affect individual financial behavior because self-efficacy plays a role in increasing self-confidence when managing finances and at the same time improving financial behavior (Ismail et al. 2017; Arofah, 2019). Research by Qamar et al. (2016) and Asebedo & Seay (2018) proves that self-efficacy can affect individual behavior in managing finances. Based on the description above, the third hypothesis in this study is:

H_3: Self Efficacy Has an Effect on Financial Behavior

2.8. The Effect of Financial Knowledge on Financial Behavior with Self Efficacy as a Mediator

Farrell et al. (2016) explains that personal finance knowledge contributes significantly on financial self-efficacy. So, the higher individual financial knowledge will increase self-efficacy. The results of the research of Qamar et al. (2016) shows financial results self-efficacy had an effect on financial behavior. Financial knowledge in individuals will support self-efficacy and simultaneously improve financial behavior (Rizkiawati & Haryono, 2018). Based on the description above, the fourth hypothesis in this study is:

H4: Self-efficacy Mediates the Effects of Financial Knowledge on Financial Behavior

2.9. Effect Of Financial Knowledge On Financial Attitude

Financially literate individuals will apply financial management concepts to manage their financial situation (Remund, 2010). High financial knowledge will motivate individuals to actively assess their financial situation. Financial knowledge will support individuals to generate positive financial attitudes based on their beliefs (Ajzen, 1991). Garber & Koyama (2016) stated that good financial knowledge in individuals will encourage a positive attitude towards financial management. Research by Kadoya & Khan (2020) and Firli & Hidayati

(2021) proves that financial knowledge has a positive effect on financial attitudes. Based on the description above, the fifth hypothesis in this study is:

H_5: Financial Knowledge Has an Effect on Financial Attitude

2.10. Effect of Financial Attitude on Financial Behavior

Individual financial behavior can be observed when individuals evaluate the management of their funds (Sabri & Zakaria, 2015). Research by Rai et al. (2019) and Adiputra & Patricia (2020) proves that financial attitudes support individual financial behavior because of the positive impact of financial attitudes on individual financial behavior. Financial attitudes play a role in supporting an individual's financial behavior so that the individual will be able to manage their finances wisely (Asandimitra & Kautsar, 2019). Based on the description above, the sixth hypothesis in this study is:

H_6: Financial Attitude Has an Effect on Financial Behavior

2.11. The Effect Of Financial Knowledge On Financial Behavior With Financial Attitude As A Mediator

Individuals with financial knowledge will have a good financial attitude (Tang & Baker, 2016). Financial attitudes can be formed on the basis of financial knowledge (Tang & Baker, 2016). Individuals with their financial attitudes will create his financial behavior (Garber & Koyama (2016). Financial knowledge will encourage individuals to do financial evaluation process and this will create his financial attitude as well as the individual becomes selective on his financial behavior (Mien & Thao, 2015; Potrich et al., 2016). Based on the description above, the seventh hypothesis in this study is:

H7: Financial Attitude Mediates The Effects Of Financial Knowledge On Financial Behavior

2.12. Research Model

Figure 1 describes the relationship between the independent variable, the mediation variable, and the dependent variable i.e. financial knowledge, self-efficacy, financial attitude, and financial behavior. Based on this, figure 1 presents the research framework.

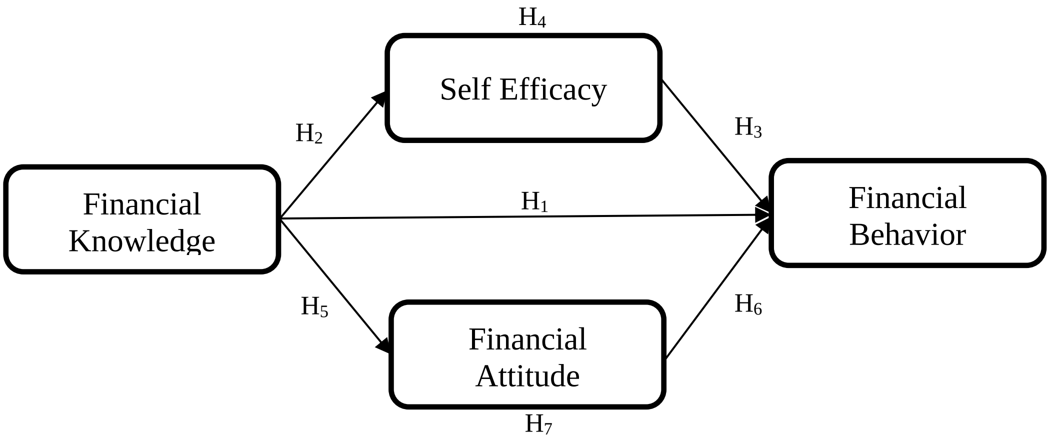

Figure 1. Thinking Framework

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3. Research Method

3.1. Population, Sample, Sampling Technique

Population is the number of items related to the information needed (Kabir, 2016). The population in this study is generation Z in Yogyakarta. The sample according to Malhotra (2010) is part of the population component selected to take part in the study. The sample in this study was 80 respondents and had met the criteria for purposive sampling. Questionnaires are used by researchers to collect data from respondents. In addition, questionnaires were used to assess the validity and reliability of data from respondents (Groves et al., 2011). The statistical test equipment in this study used Smart PLS 4.0. Financial knowledge variable indicators using 8 question items from Perry & Morris (2005), self-efficacy variables using 5 question items from Mindra et al., (2017), financial attitude variables using 8 question items from Shockey (2002), financial behavioral variables using 10 question items from Potrich et al. (2016).

3.2. Data Analysis and Hypothesis Testing

Validity Testing

Validity testing using methods convergent validity. Convergent validity shows the relationship between reflective indicators with its latent variables. Outer model measurement judging from the loading factor value of each indicator. Henseler et al. (2009) explained that the indicator is considered good if it has a loading factor value above 0,7.

Reliability Testing

To test the reliability value between indicators from construct using composite reliability. The variable is good if composite reliability value ≥ 0,7 and Cronbach's value alpha above 0,6 (Ghozali & Latan, 2015).

Hypothesis Testing

The bootstrap resampling method becomes guidelines for testing mediation on this research hypothesis. Result hypothesis testing is seen from the p value and if p-value less than 0,05, hence the hypothesis declared accepted (Ghozali, 2017).

4. Results and Discussion

4.1. Results

Hypothesis Test

Figure 2 shows the results of testing the effect of mediation self-efficacy (SE) and financial attitude FA) on the effect of financial knowledege (FK) on financial behavior (FB).

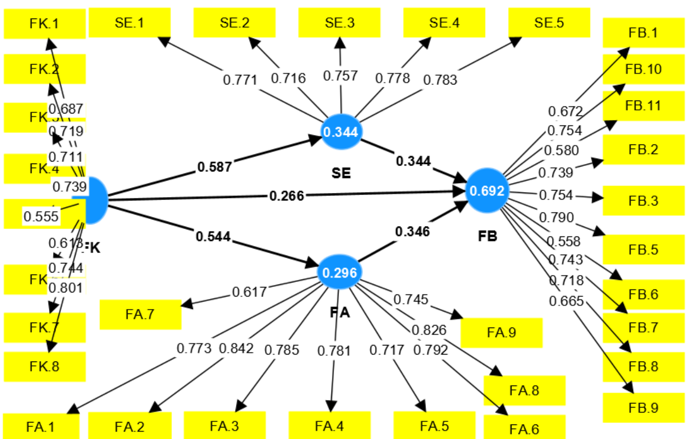

Figure 2. Structural Model Output

Validity Test

Table 1 shows indicators in financial knowledge, self-efficacy, financial attitude, and financial behavior are valid. The variables of financial knowledge, self-efficacy, financial attitude, and financial behavior had loading factors above 0.7.

Table 1. Validity Test Result

Construct/Item	FK	SE	FA	FB
FK 1	0,687			
FK 2	0,719			
FK 3	0,711			
FK 4	0,739			
FK 5	0,555			
FK 6	0,613			
FK 7	0,744			
FK 8	0,801			
SE 1		0,771		
SE 2		0,716		
SE 3		0,757		
SE 4		0,778		
SE 5		0,783		
FA 1			0,773	
FA 2			0,842	
FA 3			0,785	
FA 4			0,781	
FA 5			0,717	
FA 6			0,792	
FA 7			0,617	
FA 8			0,826	
FA 9			0,745	
FB 1				0,672
FB 2				0,739
FB 3				0,754
FB 4				0,790
FB 5				0,558
FB 6				0,743
FB 7				0,718
FB 8				0,665
FB 9				0,754
FB 10				0,580

Source: Primary Data Processed (2023)

Reliability Test

Table 2 is the tabulation result of the reliability test. Each variable in this study is declared reliable because each variable has a composite reliability value greater than 0.7 and a cronbach alpha value greater than 0.6

Table 2. Reliability Test Result

Variable	CompositeReliability	Cronbach's Alpha	Conclusion
FK	0,863	0,851	Reliable
SE	0,832	0,822	Reliable

FA	0,915	0,911	Reliable
FB	0,888	0,883	Reliable

Source: Primary Data Processed (2023)

Hypothesis Test

Table 3 shows the tabulation of the results of hypothesis testing. The results of hypothesis testing show that financial knowledge have an effect on financial behavior (hypothesis accepted), financial knowledge have an effect on self-efficacy (hypothesis accepted), self-efficacy have an effect on financial behavior (hypothesis accepted), self-efficacy mediates the effect of financial knowledge on financial behavior (hypothesis accepted), financial knowledge have an effect on financial attitude (hypothesis accepted), financial attitude have an effect on financial behavior (hypothesis accepted), and financial attitude mediates the effect of financial knowledge on financial behavior (hypothesis accepted).

Table 3. Hypothesis Test Result

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Conclusion
FK→ FB	0,266	0,261	0,092	2,895	0,004	Hypothesis Accepted
FK → SE	0,587	0,607	0,060	9,745	0,000	Hypothesis Accepted
SE → FB	0,344	0,352	0,122	2,827	0,005	Hypothesis Accepted
FK → SE →FB	0,202	0,213	0,076	2,659	0,008	Hypothesis Accepted
FK → FA	0,544	0,566	0,070	7,755	0,000	Hypothesis Accepted
FA → FB	0,346	0,343	0,106	3,258	0,001	Hypothesis Accepted
FK → FA → FB	0,188	0,195	0,067	2,804	0,005	Hypothesis Accepted

Source: Primary Data Processed (2023)

4.2. Discussion

Financial Knowledge Has an Effect on Financial Behavior

One way to improve quality of life is to increase financial knowledge which can improve financial behavior (Mutlu & Özer, 2021). Education can increase an individual's financial knowledge so that they are better able to make better decisions about money (Hilgert et al., 2003). By understanding more financial knowledge, a person will be better able to use money wisely (Yuesti et al., 2020). Research by Sayinzoga et al. (2016), Yahaya et al. (2019), and Mutlu & Özer (2021) provides support that financial knowledge affects financial behavior.

Financial Knowledge Has an Effect on Self-Efficacy

Extensive financial knowledge in individuals will support self-efficacy especially matters related to finance (Farrel et al., 2016). This research is in line with the research of Lone & Bhat (2022) and Lee et al. (2023) which prove that financial knowledge contributes to self-efficacy. Individuals' financial knowledge will also support their self-efficacy (White et al., 2019).

Heckman & Grable (2011) explain that financial knowledge has a significant contribution to a person's self-efficacy. Individuals who have good financial knowledge are able to increase financial self-efficacy.

Self-Efficacy Has an Effect on Financial Behavior

According to social cognitive theory (Bandura, 1986), self-efficacy influences individual decisions in behavior. Research by Ismail et al. (2017), Arofah (2019), and Dare et al. (2023) proves that self-efficacy can affect individual financial behavior because self-efficacy is able to make confidence in managing finances while supporting financial behavior

Self-Efficacy Mediates The Effect Of Financial Knowledge On Financial Behavior

The results of this study can be concluded that the higher the knowledge financial from generation Z then this supports self-efficacy and at the same time financial behavior. Financial Knowledge contribute significantly on financial self-efficacy (Ramalho & Forte, 2018), and self-efficacy has a role in increasing the capacity of individual financial behavior (Farrell et al.,2016).

Financial Knowledge Has an Effect on Financial Attitude

Garber and Koyama (2016) concluded that good financial knowledge will encourage a positive financial attitude. Research by Bhushan & Medury (2014), Yong et al. (2018), and Banthia & Dey (2022) proves that financial knowledge has a positive effect on individual financial attitudes. If a person has good financial knowledge, they will have a positive attitude on their own finances (Banthia & Dey, 2022).

Financial Attitude Has On Effect on Financial Behavior

Research by Çoşkun & Dalziel (2020), Wangi & Baskara (2021), and Khalisharani et al. (2022) proves that financial attitudes have a positive effect on financial behavior. Individual financial attitudes when managing finances play a role in shaping financial behavior more wisely (Ridhayani & Johan, 2020).

Financial Attitude Mediates The Effect Of Financial Knowledge On Financial Behavior

Results of this study show financial attitude mediating the effect of financial knowledge on financial behavior. It can be concluded that financial knowledge plays a role in improving financial attitudes (Tang & Baker, 2016; Garber & Koyama, 2016) and at the same time financial attitudes have an effect on financial behavior (Potrich et al., 2016)

5. Conclusion

This study aims to determine the role of self-efficacy and financial attitudes as mediates on the effect of financial knowledge on financial behavior in Generation Z in Yogyakarta. The results of this study prove: 1) financial knowledge has an effect on financial behavior; 2) financial knowledge has an effect on self-efficacy; 3) self-efficacy has an effect on financial behavior; 4) self-efficacy mediates the effect of financial knowledge on financial behavior; 5) financial knowledge has an effect on financial attitudes; 6) financial attitudes have an effect on financial behavior; and 7) financial attitudes mediate on the effect of financial knowledge on financial behavior.

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