

Islamic Green Financial Literacy: Lesson from Sme's Islamic Indonesian

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Abstract

The development of Islamic financial literacy behavior has been good among MSMEs, but as a result of global warming, Islamic green finance is still new in its application. This study aims to explore the extent to which the literacy of MSMEs in Jogjakarta whose ownership is Muslim applies Islamic green finance so that there is a change in Islamic financial behavior. The literacy includes being influenced by external and internal factors, namely social influence; Islamic financial knowledge; Islamic financial attitude; Islamic financial behavior; fiqh knowledge; Islamic green finance.

The research method to reveal it, by testing the variable instrument is the validity and reliability test, goodness-of-fit measures, with structural equation modeling.

The results show that there is no social influence on Islamic financial attitude, there is an influence of Islamic financial knowledge on Islamic financial attitude, there is an influence of Islamic financial attitude on Islamic financial behavior, there is an influence of fiqh knowledge to strengthen Islamic financial knowledge on Islamic financial attitude, and there is an Islamic green influence. financial strengthens Islamic financial knowledge towards Islamic financial attitude.

Keywords: Financial literacy, Fiqh Knowledge, Islamic Financial Knowledge, Islamic Financial Attitude, Islamic Financial Behavior, Islamic Green Finance Social Influences.

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Introduction

The lack of financial literacy in several countries in the world is of particular concern and requires immediate attention (Lusardi, 2019). This is because financial accessibility is limited due to financial literacy constraints, especially Islam (Zulhibri, 2016). Whereas the availability of financial literacy is important as an important resource in disseminating knowledge about finance (Faulkner, 2021), because Financial knowledge, experience, and learning preferences affect financial literacy (Hogarth & Hilgert, 2002). This conceptualization of financial inclusion is important because it must take into account a better future for businesses and an integral part of the literacy process (Harker, 2021).

Islamic green finance literacy has shown an increasing trend in the world in the last two decades (Sekreter, 2017a), This is because green financial literacy puts forward a capital expenditure model based on environmentally friendly or green business (Piratti & Cattelan, 2018; World Bank, 2019), fintech based (Cen & Ranke, 2018), and in accordance with sharia law (Erzad & Erzad, 2017), also because Islamic Green Finance (sharia) is able to improve the economy, because it encourages sustainable growth and development, accompanied by the concept of risk sharing, and provides tools to protect individual welfare because it is driven by sharia law. (Bayzid & Nobanee, 2020). In order not to be outdated, it is important to have the participation of civil society organizations and local banks in financial literacy (Hilt & Rahn, 2016). Financial literacy can be done in various ways, as long as there is knowledge transfer, it will increase financial literacy knowledge (Mladenović & Krajina, 2020).

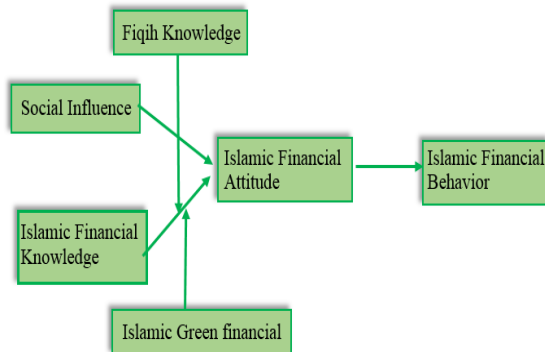
It is necessary to know that a government policy on financial literacy is

needed for financial inclusion of low-income small businesses, especially during times of economic crisis (Babajide et al., 2020). So that Islamic financial literacy becomes a driver of economic growth and becomes an important contributor to economic growth through financing the entrepreneurship domain of small and medium enterprises (Ledhem & Moussaoui, 2021). In the long term, it can be a solution for financial stability, poverty alleviation and wealth distribution, financial and social inclusion, and environmental conservation (Singh & Record, 2019).

For this reason, financial education literacy is the main solution for global finance in overcoming crisis management (Alsemgeest, 2015). Moreover, documentation is an obstacle in financial literacy (Abdu & Adem, 2021)

In practice, the attitude of a Muslim Micro, Small and Medium Enterprise (MSME) in understanding Islamic finance is certainly influenced by several indicators. These indicators can have a direct or indirect effect, such as social influence (Dinç et al., 2021), Islamic finance knowledge (Marzuki & Nurdin, 2020), and indicators that strengthen their knowledge such as fiqh knowledge and Islamic green finance (Hidayat et al., 2020). This is the design of this research model, more details are seen in Figure 1. These indicators will encourage a Muslim's attitude towards understanding Islamic finance. In the medium and long term, an understanding attitude towards Islamic financial literacy will encourage Islamic financial behavior (Eliza & Susanti, 2020) and become a habit in carrying out daily business (Poon et al., 2017). This study invites us to study the perspective of MSME actors who are Muslim in running a sharia-based green finance business.

Gambar 1. Research Design



Theory And Hypotheses Development

Social influence on Islamic Financial Attitude

Several cases in Islamic-majority countries lead to low Islamic financial literacy which will ultimately reduce Islamic financial behavior (Mindra et al., 2022). Continuous performance is needed in order to create the sustainability of this Islamic financial literacy. Communication and social factors of friendship are social factors that influence a person's attitude in adopting literacy (Ali et al., 2020), Likewise, religiosity and family influence are also dominant factors on intentions and attitudes to adopt financial literacy (Juma et al., 2019). The many social factors that influence this in the medium and long term will encourage an understanding of Islamic financial knowledge. With this large understanding of literacy, it greatly affects consumer behavior (Junaidi et al., 2022). Therefore, we assumed the following research hypotheses:

H1: There is a positive and significant influence of social factors on Islamic financial attitude.

Islamic Financial Knowledge on Islamic Financial Attitude

Islamic knowledge has a large role in the development of a Muslim's behavior. Likewise, knowledge of Islamic finance

will encourage understanding of Islamic business in the future. The level of knowledge of Islamic finance greatly affects the behavior of Islamic finance (Gunawan et al., 2021). Therefore, education and training are needed, which will be able to effectively improve the financial situation in increasing financial literacy (Trunk et al., 2017). Today's technology will also be able to encourage this. Education through online media can increase people's literacy knowledge (Kuchciak & Wiktorowicz, 2021). That is, Islamic Financial Knowledge has an effect on Islamic Financial Attitude (Albaity & Rahman, 2019). Therefore, we assumed the following research hypotheses:

H2: There is a positive and significant influence of Islamic financial knowledge on Islamic financial attitude.

Islamic Financial Attitude Towards Islamic Financial Behavior

Low financial literacy will result in low financial attitude and behavior (Kevser & Doğan, 2021). Therefore, it takes motivation to learn Islamic financial literacy in achieving Islamic financial attitudes (Durak et al., 2020). By learning good Islamic financial literacy, it will create a planned financial management (Setyowati et al., 2018). This attitude of adoption of Islamic finance plays a central role as the main economic agent/institution in the global diffusion of Islamic financial ideas (E. S. Fang, 2014). Sharia law relating to financial literacy, will also shape the 'Islamic' character of the company's operating behavior (Bassens et al., 2012). Therefore, we assumed the following research hypotheses:

H3: There is a positive and significant influence of Islamic financial attitude factors on Islamic financial behavior.

Fiqh Knowledge Strengthening Islamic Financial Knowledge Against Islamic Financial Attitude

Fiqh knowledge will be constrained if there is no continuous learning process (Latif & Nurainiah, 2018). This obstacle must be found a way out, because a better understanding of fiqh from the ummah will have a more positive impact on its adaptive behavior (Thoyyibah et al., 2019). The higher the science of fiqh and sharia, the higher the implementation (Aisyah & Saepuloh, 2019). For example, the implementation of halal products and knowledge of fiqh have a significant effect on Muslim consumers in Indonesia to use sharia FinTech products (Nurdin, 2020). The wider impact of fiqh has an effect on Islamic science and is even able to adapt and be able to be applied to today's increasingly modern fintech (Marzuki et al., 2020). Therefore, we assumed the following research hypotheses:

H4: Fiqh knowledge strengthens Islamic financial knowledge towards Islamic financial attitude.

Islamic Green Financial Strengthening Islamic Financial Knowledge Towards Islamic Financial Attitude

Islamic green finance is important as part of one's knowledge, especially as a manager of a business (Sekreter, 2017b), where Islamic green finance is a path of innovation in finance in environmental protection, such as paperless, informative, efficient, and has important practical effects on economic transformation (He et al., 2020) And of course it involves Islamic factors (Liu & Lai, 2021). Currently, the Islamic financial attitude has a tendency for Fintech-based financial services that will enrich innovation in shaping Islamic financial behavior for the ummah (Rabbani, 2022), and this is even more successful if Islamic financial literacy involves a social dimension, an

economic dimension, and an environmental dimension (Abdelfattah & Zyadat, 2017). Implementation in Islamic banks is a real case has made a significant contribution to green banking behavior to improve the environment as a means of cost and energy savings, preservation of natural resources and the need to respect all living things (Uddin & Ahmmed, 2018). Thus it can be understood that Islamic green finance will encourage one's knowledge in carrying out business actions. Therefore, we assumed the following research hypotheses:

H5: Islamic Green financial Strengthening Islamic Financial Knowledge towards Islamic Financial Attitude.

Research Methods

Research Design

The design of this study was adopted from Dinç et al., (2021); Marzuki & Nurdin, (2020); Hidayat et al., (2020) and developed by researchers, and applied to Small and Medium Enterprises in Indonesia who are Muslim, as shown in Figure 1.

This study also investigates the relationship between six (6) variables, namely Social Influence, Islamic Financial Knowledge, Islamic Financial Attitude, Islamic Financial Behavior, Fiqh Knowledge, and Islamic Green Financial. All variables were measured using 5 Likert scales, with 27 questionnaire items.

Sampling Frame And Data Colection Method

The sample size uses the lameshow formulation (Lwanga & Lameshow, 1991) where the proportion used is 20% and absolute precision / error is 5% with the following calculations:

$$n = \frac{Z^2 \cdot p(1-p)}{d^2}$$

$$1,96^2 \cdot 0,2 (0,8)$$

$$n = \frac{\dots}{0,05^2}$$

$$3.8416 \cdot 0.16$$

$$n = \frac{\dots}{0.0025}$$

$$0.614656$$

$$n = \frac{\dots}{0.0025}$$

n = 245.9

n = 246 Respondents.

The number of respondents who will be used in this study is 246 respondents. Sample method with purposive sampling, double sampling technique with google form, this activity is carried out within 5 months, namely January - May 2022.

Data Analysis

This study used inferential statistics. The outer model is carried out by testing the quality of the raw data instrument using a reliability test with the Cronbah's Alfa method and Composite Reliability > 0.7 (Werts et al., 1974), while the validity test uses convergent validity and discriminant validity, where convergent validity with outer loading factor > 0.70 (Chin, 1998), and Discriminant Validity with Average Variable Extract (AVE) > 0.50 (Hair et al., 2014). Inner model by looking at Goodness-of-fit (Bentler & Bonett, 1987). To produce the output of this study using descriptive statistical analysis and Structural Equation Modeling (SEM) analysis, using the SmartPLS version 3 software.

Research Result

This study has a sample of 246 respondents, dominated by 71.14% are men, with the age of 36-40 years at 31.30%, income 2-3 million rupiahs at 41.87%. More in Table 1.

Table 1. Demographic information of the Sample

	Number (n)	Percent (%)
Gender		
Male	175	71.14
Female	71	28.86
Age		
26 - 30	21	8.54
31 – 35	49	19.92
36 – 40	77	31.30
41 – 45	62	25.20
46 - 50	29	11.79
> 50	8	3.25
SMSE		
Individual	194	78.86
Group	52	21.14
Income / Month		
0 – 1.000.000	38	15.45
1.000.001 – 2.000.000	72	29.27
2.000.001 – 3.000.000	103	41.87
3.000.001 – 4.000.000	27	10.97
4.000.000 – 5.000.000	6	2.44
Total	246	100

Based on the results of the outer loading, it indicates that it must be above 0.7, causing an indicator to be dropped. The social influence (SI) indicators that must be dropped are SI1, SI3, SI7, SI8, SI9, and SI10. Islamic Financial Knowledge (IFK) indicators dropped IFK1, IFK2, IFK6, IFK8, and IFK9. Islamic Financial Attitude (IFA) indicators are IFA1, IFA2, IFA3, IFA4, IFA5, IFA6, IFA7, and

IFA10. Fiqh Knowledge (FK) indicator are FK1, FK2, FK3, FK4, FK5, FK9, and FK10. Islamic Green Financial (IGF) indicators are IGF8, IGF9, IGF10, IGF11, IGF12, IGF13, IGF7, and IGF 14. So that the total of 61 indicators that were removed was 34, to the remaining 27 indicators. More details in Figure 2 and Table 4.

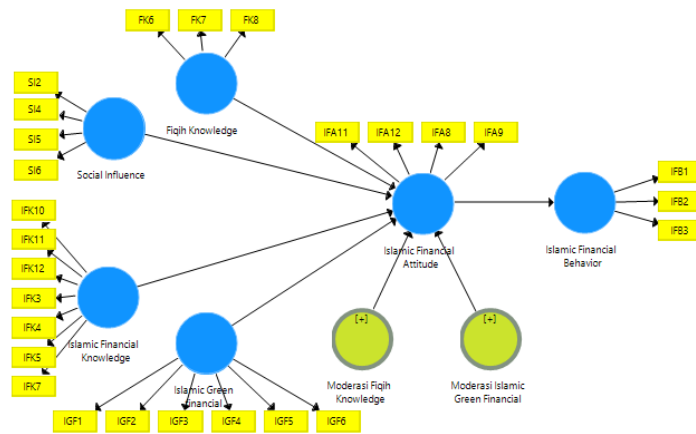


Figure 2. Research Results with Structural Equation Modeling

After dropping the data, the results of the validity test are detailed in Table 2. From Table 2, the convergent validity test with mean loading factors is all

above 0.7 and discriminant validity with Average Variable Extract (AVE) is above 0.5, it can be concluded that all variables in this research are valid.

Table 2: Results of variables validity research test

Variables	Convergent Validity	Discriminant Validity
	Mean Loading Factors	Average Variable extrac (AVE)
Social Influence (SI)	0.845	0.849
Islamic Financial Knowledge (IFK)	0.808	0.809
Islamic Financial Attitude (IFA)	0.801	0.882
Islamic Financial Behavior (IFB)	0.878	0.803
Islamic Green Financial (IGF)	0.840	0.841
Fiqh Knowledge (FK)	0.882	0.882

The outer model test is the reliability test as shown in Table 3 showing the data quality test using Cronbah's alpha and

composite reliability (CR), both of which have met the criteria of more than 0.7 so that all variables are declared reliable.

Table 3: Results of variables reliability research test, and Number Of Valid Item

Variables	Cronbah’s Alfa	Composite Reliability	Number of Question	Number Of Valid Item
Social Influence (SI)	0.879	0.911	10	4
Islamic Financial Knowledge (IFK)	0.913	0.930	12	7
Islamic Financial Attitude (IFA)	0.814	0.878	12	4
Islamic Financial Behavior (IFB)	0.852	0.910	3	3
Islamic Green Financial (IGF)	0.917	0.927	14	6
Fiqh Knowledge (FK)	0.858	0.913	10	3

The results of the distribution of respondents' answers to all variables with 6 variables and 27 indicators show all factor loadings above 0.7, this means that

all indicators on all variables deserve to be continued as the basis for calculating further research, complete in Table 4.

Table 4: Summary of means, and construct loadings

ariables	Item Indicators / Questionnaire	Mean	Loading
Social Influence SI	SI2. Senior clerics at the National Sharia Council made me confident to borrow money from Sharia Fintech	4.360**	0.736
	SI4. In general, Islamic organizations have supported the use of sharia FinTech services	3.630*	0.927
	SI5. I know that sharia FinTech products have halal certification from the National Sharia Council	3.790	0.908
	SI6. Certifications and logos are potential sources of my awareness of halal loans from Islamic FinTech.	4.060	0.810
Islamic Financial Knowledge (IFK)	IFK3. Islamic debit card works like an Islamic credit card.	3.606*	0.854
	IFK4. The level of income affects the retirement age of a Muslim in the future.	3.660	0.757
	IFK5. Islamic bank accounts can only be owned by Muslim adults.	3.670	0.829
	IFK7. Islamic finance knowledge is only required for those working in Islamic financial institutions.	3.700	0.805
	IFK10. Only Muslim adults can use online Islamic banking services.	3.740	0.832
	IFK11. You can pay for goods and services through Islamic bank mobile.	3.880**	0.728
	IFK12. e-money is money that you can use to pay Islamically online.	3.610	0.852
Islamic Financial Attitude (IFA)	IFA8. I often spend more money than I mean too	4.380	0.750
	IFA9. I often buy things without thinking whether I can afford them or not	4.550**	0.732
	IFA11. I think I can manage my money	4.370*	0.854
	IFA12. I am (actually) worried in managing money due to my lack of Islamic Finance Knowledge.	4.420	0.867
Islamic Financial Behavior (IFB)	IFB1. Do you regularly save in Islamic banks ?	4.330*	0.860
	IFB2. Do you often make export or import transactions at Islamic banks?	4.560**	0.867
	IFB3. Do you currently have debt in an Islamic bank ?	4.520	0.908
Islamic Green Financial (IGF)	IGF1. Do you agree that the Islamic financial system prohibits the interest reward system?	3.850	0.891
	IGF2. Do you agree that speculation in green companies is prohibited in the Islamic financial system ?	3.610*	0.779
	IGF3. Do you agree that there are hedging instruments in the Islamic financial system?	3.680	0.832
	IGF4. Do you agree that it is permissible to invest in green industries in the Islamic financial system?	3.750	0.855
	IGF5. Do you agree that a green risk sharing system is allowed in the Islamic financial system?	3.900**	0.843
	IGF6. Do you agree that there is such a thing as a credit card in the Islamic financial system?	3.650	0.842
Fiqh Knowledge (FK)	FK6. I can determine halal and haram products well	3.980*	0.875
	FK7. I can read more than five hadiths related to Islamic business	4.070**	0.886
	FK8. I can read more than five verses of the Qur'an related to Islamic business	3.990	0.886

* Lowest mean
 **Highest mean

The results of the research hypothesis test with a 5% alpha significance probability show the results as shown in Table 5. From Table 5 it can be seen that

there is one (1) insignificant variable, namely social influence (SI), the rest is significant.

Table 5: Summary of Result of Research Test

Variabel	β	Prob	Moderator		Mediator		Adj R ²	Remark
			β	Prob	β	Prob		
Social Influence (SI)	0.049	0.082***						Rejected
Islamic Green Financial Knowledge (IFK)	0.156	0.002**					0.388	Received
Islamic Green Financial (IGF)			0.186	0.026**				Received
Fiqh Knowledge (FK)			0.239	0.049**				Received
Islamic Financial Attitude (IFA)					0.702	0.000*	0.548	Received

Dependent Variable: Islamic Financial Behavior (IFB).

*p>0.01

**p>0.05

***p>0.1

More details in Table 6 where the measurement of Goodness-of-fit has shown a good model.

Table 6: Goodness-of-fit measures for SEM

Indikator	Resultt	Criteria
SRMR	0.070	acceptable if ≤ 0.08
d_ULS	1.847	acceptable if ≥ 0.95
d_G	0.994	acceptable if $P \geq 0.05$
Chi-Square	213.577	close to zero
NFI	0.945	acceptable if ≥ 0.90
rms-Theta	0.152	close to zero

Based on the analysis in the previous table, conclusions can be drawn from the results of the study as shown in Table 7

Table 7: Summary of research hypothesis conclusions

Hypothesis	Test Result	Conclusion / Result of hypotheses
H1: There is a positive and significant influence of social factors on Islamic financial attitude.	Positive, not significant	Hypothesis is rejected
H2: There is a positive and significant influence of Islamic financial knowledge on Islamic financial attitude.	Positive, significant	Hypothesis is supported
H3: There is a positive and significant influence of Islamic financial attitude factors on Islamic financial behavior.	Positive, significant	Hypothesis is supported
H4: Fiqh knowledge strengthens Islamic financial knowledge towards Islamic financial attitude.	Positive, significant	Hypothesis is supported
H5: Green financial Strengthening Islamic Financial edge towards Islamic Financial Attitude.	Positive, significant	Hypothesis is supported

Discussion

There is a Positive and Significant Influence of Social Factors on Islamic Financial Attitude.

Based on the case in the results of this study, that there is no influence of social factors on Islamic financial attitude. This is because social organizations have not provided enough financial literacy, especially Financial Technology (Fintech) in Home Industries, and Micro Small and Medium Enterprises (MSMEs). This is understandable because there are few Islamic economic-based social organizations and few carry out Islamic financial literacy processes in the community. This social factor is actually important as a means of disseminating Islamic financial information, because social influence has a positive effect on Islamic product trust (Abdelmonaim, 2021) & (Lajuni et al., 2017). So there is an assumption that this lack of literacy is a non-compliance with regulations on fintech innovation, which will create inefficiency. To overcome this, it is necessary to promote effective regulation of FinTech innovation in order to achieve a balance between regulation and innovation (Bu et al., 2021). And this seems to have been formed by global authorities, so the touch of Islam is still lacking (Shavit & Spengler, 2018). For this reason, it is necessary to eliminate weaknesses with this collaboration, so that the use of FinTech is more moderate (Laidroo & Avarmaa, 2020). With implementation, these influences and expectations will be able to influence Islamic financial attitudes in the future.

There is a Positive and Significant Influence of Islamic Financial Knowledge on Islamic Financial Attitude

Sufficient knowledge of Islamic finance will encourage someone to apply it to their Islamic activities. In this research

phenomenon, there is an influence of Islamic Financial Knowledge on Islamic Financial Attitude, especially in the answers of respondents with the highest mean, namely MSMEs using Islamic FinTech because of its convenience and conformity with Islamic knowledge. This is due to the convenience and convenience of the cashless system (Humbani & Wiese, 2018) dan (Diette et al., 2021), as a future mobile proximity payment (Loh et al., 2022), and at the same time encourage Muslims to switch to e-wallet (Aji et al., 2020). As it is known that mobile phones are increasingly becoming a channel for providing access to formal financial services in the form of financial services, marketing interactions, product and service exchanges, and social networking relationships, to improve consumer welfare. (J. Fang et al., 2014). Thus knowledge of Islamic finance will encourage Islamic financial behavior.

There is a Positive and Significant Influence of Islamic Financial Attitude Factors on Islamic Financial Behavior

The existence of awareness behavior as a result of sufficient knowledge of Islamic finance will affect daily behavior in implementing Islamic finance. These behaviors as a form of personal innovation, perceived risk, perceived ease of use and long-term orientation as factors that significantly affect the perceived value of e-wallet or mobile wallet users (Tran Le Na & Hien, 2021). This e-wallet or cellular wallet is increasingly being used by people as daily shopping at online shopping. Perceived ease of use, perceived usefulness, and enjoyment, had a positive and significant impact on behavioral intention to use E-wallet, although this belief did not show a direct effect. (To & Trinh, 2021), and driven by affective factors in the form of hesitation due to distrust of e-wallet shopping (Pham

et al., 2020). Of course, these doubts and beliefs can be avoided by exploring Islamic financial knowledge so that Islamic financial behavior occurs as a basis for action.

Fiqh Knowledge Strengthens Islamic Financial Knowledge Towards Islamic Financial Attitude

Good fiqh knowledge will create a strong impetus for Islamic action. Emphasis on legitimate tools of ijihad and Islamic maslahah will be a successful tool for jurisprudence (Parray, 2012). Knowledge of fiqh in relation to Islamic business hadiths is a milestone in neutralizing differences in society that may inherently lack understanding of Islamic business fiqh knowledge. (Mustafa & Agbaria, 2016). Moreover, currently polarized religions, ethnic affiliations, distrust of the authority of Islamic websites, and lack of organizational resources have limited the reach of Muslims. (Shavit & Spengler, 2017). And, the opinion which states that working Muslim women have moderated Islamic values (Sakai & Fauzia, 2016). Of course, the inherent knowledge of fiqh in daily life, distrust of Muslim sites, and the lack of Muslim business organizations, do not rule out increasing knowledge of Islamic business fiqh in the future as a form of growth for the world's Muslim ummah and its business. Although there are pros and cons, of course, if accompanied by a deepening of good fiqh knowledge, it will strengthen knowledge of Islamic finance, and also encourage concrete actions in the field of Islamic finance in business. So it can be concluded that a person's strong Islamic religious background will encourage a Muslim's business ethics (Quddus et al., 2009).

Islamic Green Financial Strengthening Islamic Financial Knowledge Towards Islamic Financial Attitude

Islamic finance training will increase Islamic financial literacy (Alfarisi et al., 2020), This means that Islamic financial knowledge will grow along with the learning process. Today Islamic financial literacy has reached a higher phase, which involves Islamic green finance. Islamic green finance involves financing factors based on environmentally friendly (green business) and the use of financial technology (FinTech). This Islamic green financial literacy behavior will certainly strengthen Islamic financial knowledge, for MSME business actors. Knowledge apart from the above, as well as profit-sharing and risk-sharing systems are also an important part of this literacy, to avoid single responsibility (Song & Wang, 2020). In the case of several developed countries, especially during the pandemic & crisis, Islamic business risk sharing is returned to the government, to reduce economic contraction (Sifat et al., 2022). For MSMEs, synchronization and better techniques and processes are needed to improve time coordination between various MSME financial actors (Wong, 2021). Risk taking by the government to improve cost efficiency as an intervening variable in the relationship between profit-financing models (Belkhaoui et al., 2020). This is done to reduce Islamic hedging products, and protect risk exposure, as well as protect against speculative businesses as rent seeking (Mohamad et al., 2014). Therefore, literacy for MSMEs needs to be improved to identify and look for opportunities and as a result, literacy is more informative and stronger on exploration (Ahmad et al., 2020). In addition, literacy is carried out to reduce customer confusion and risk (Tarabieh, 2020).

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