

## Effectiveness of Education Module Implementation on Increasing Islamic Financial Literacy and Halal Literacy of MSMEs Perpetrators

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### Abstract

This research was conducted to measure the impact of the implementation of Islamic Financial Literacy Education Module and Halal Product for Micro, Small and Medium Enterprises (MSMEs). The population in this study is the perpetrators of SMEs that run their business in the region of Yogyakarta Special Region. The sampling technique used is purposive sampling so that the sample used is 60 with the division of 30 experimental group and 30 people as the control group. Development of media using ADDIE model. Educational module has been through the phase of analysis, design, development, and implementation of MSMEs. At the evaluation stage, measurements are made to the perpetrators of SMEs with paired t test. The results of effectiveness test show the use of Islamic Financial Literacy Education Module and Halal Product can increase Islamic financial literacy and halal literacy of MSMEs perpetrators. Increased Islamic financial literacy and halal literacy can be seen from the average score before and after the use of Islamic financial literacy learning module and halal literacy. The conclusion of this research is a module with an important syariah theme done to provide ease in the transfer of knowledge of Islamic financial management and halal literacy for MSMEs.

**Keywords:** sharia economics; halal literacy; Islamic financial literacy

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## INTRODUCTION

Indonesia is a country with a very large population. The large number of population creates its own problems related to the development of the economy. The large number of population gives great potential in the development of small and medium enterprises (MSMEs) that are expected to strengthen the foundations of the state economy. However, the large potency and existing MSMEs in Indonesia have not been managed with good financial knowledge in other words the running of MSMEs in Indonesia is managed according to previous experience or fellow perpetrators of MSMEs.

Indonesian population in addition to the largest is also a country with a majority of the population is Islam. Being called as a Muslim country makes people have sensitivity to the implementation of Islamic laws in every day-to-day life. Included in the business process,

Indonesians expect to be managed by not deviating from Islamic laws. Therefore, many MSMEs perpetrators in Indonesia expect to run their business according to what is taught by Islam related to financial management and halal business.

Islamic financial literacy is the development of the financial literacy concept. The concept of financial literacy is much studied by researchers (Antara, Musa, & Hassan, 2015; Glaser & Weber, 2007; Hung, Parker, & Yoong, 2009). Financial literacy is the ability to manage personal finances (Chen & Volpe, 1998). Nevertheless, research that focuses on the concept and development of Islamic financial literacy is still limited (Antara, Musa, & Hassan, 2016). Whereas the level of financial literacy affects one's financial behavior (Xiao, Ahn, Serido, & Shim, 2014). Understanding and custom on the fundamentals of Islamic financial literacy also affects the behavior of business owners in conducting business in accordance with Islamic economic rules and ethics (Antara et al., 2016).

Various studies on financial literacy still focus on measurement of financial literacy (Bernheim & Garrett, 2003; Brown, Grigsby, van der Klaauw, Wen, & Zafar, 2016; Sayinzoga, Bulte, & Lensink, 2016), exploration of Islamic financial literacy (Abdullah, Razak, & Ali, 2015), measurement of halal literacy (Ahmad, Kadir, & Salehuddin, 2013; Aslan & Aslan, 2016), integration of Islamic financial literacy and halal literacy (Antara et al., 2015, 2016; Jaffar & Musa, 2016), and the impact of financial education on improving financial literacy (Goetz, Durband, Halley, & Davis, 2011; Jacob, Hudson, & Bush, 2014). Research conducted by (Jaffar & Musa, 2016) shows that Islamic finance and halal is the business sector that is in accordance with sharia and has the same values and principles. Despite the similarities, both Islamic and halal finances grow independently, without any integration (Jaffar & Musa, 2016) companies that have already had halal certificates do not necessarily manage their finances lawfully. High implementation of halal literacy does not certainly followed by high literacy of Islamic finance, so it is needed further study and education to improve both. Not only that, financial institutions must continually improve their knowledge on the existence and principles of Islamic financing, product benefits and the difference with conventional financing.

The purpose of this study is to measure the impact of the implementation of Islamic Financial Literacy and Halal Product Education Module for Micro, Small and Medium Enterprises (MSMEs). Various studies that have been implemented still have no concerns and efforts to develop educational modules of Islamic financial literacy and halal products so it is still very worth doing especially in the State of Indonesia. Information processing theories put forward. One of the strategies in order that information can be absorbed, remembered and recalled is to provide a learning module to be opened if the perpetrators of MSMEs forget the training that has been obtained.

Module development and application have been done with the model of ADDIE (Wahyuni, 2017; Branch, 2009). In the evaluation stage, the evaluation is done in two forms: formative and summative evaluation. Formative evaluation has been carried out, namely in the stage of validation, testing, and implementation. From the process of formative evaluation has produced a module on Islamic financial management literacy and halal product literacy. Increased public financial literacy can be done with education. Processing theory explains that a strategy is needed to make a learner is able to save a memory of what has been learned from a learning process. If this can be done, then the process to implement the knowledge will be easier because information can be called at any time.

Good financial literacy education is the only way to build life skills, especially in financial literacy (Koh & Lee, 2010; Mandell & Klein, 2009). Prawitz & Cohart (2014) mention that financial education program succeeded in improving the financial literacy of employees. The importance of financial literacy education is disputed by Willis (2011) who states that the education of financial literacy does not affect the level of financial literacy and does not have a significant impact on financial management capabilities. With that in mind, then the hypothesis can be formed as follows.

H<sub>1</sub>: There is an increase in Islamic financial literacy and halal literacy after using the module.

## METHOD

. This research was an experimental research with primary data type. The population in this study was the perpetrators of MSMEs that run their business in the Special Region of Yogyakarta. The sampling technique used was purposive sampling so that the sample used was 60 with the division of 30 people as experimental group and 30 people as control group. The research samples were the micro, small, and medium enterprises (MSMEs) perpetrators which actively participated in economic empowerment program of Dompot Dhuafa Yogyakarta. The perpetrators of MSMEs were incorporated in various communities spread in Bantul, Sleman, Kulonprogo, Gunungkidul and Yogyakarta districts located in Yogyakarta Special Region. Paguyuban Institut Mentas Unggul and Warung Beres were chosen for meeting the criteria: having members who were active in joining training, having members spread across the District and City in the Province of Yogyakarta Special Region, having members with diverse educational backgrounds, the business run by the members were the main job, not the sideline business and having a culinary business.

Financial literacy is the activity and process in improving the knowledge, belief, and skills of the community in order to be able to perform financial management well (OJK, 2014). While syariah financial literacy in this research is knowledge and skills of financial management in order to be able to welfare based on all Islamic sharia principles. Halal literacy is the ability of a person to be able to distinguish food and beverages which are halal and haram according to Islamic sharia guidance. Meanwhile, module is a teaching material in print form in order to be able to learn independently. Table 1 shows the indicators on the variables used.

**Table 1.** Measurement Indicators of Islamic Financial Literacy and Halal Literacy

No	Group	Indicator	Explanation
1	Islamic financial literacy	1.1. Simple financial management 1.2. Vanity transactions in trade 1.3. Debts and loans 1.4. Investment and insurance	Understanding basic personal finance, separating business money and personal money Transactions prohibited by Islamic norms in trading activities Owed term and courtesy in Islam The importance of insurance and investment in accordance with Islamic principles
2	Halal literacy	2.1. Definition of halal and haram 2.2. Products of halal and haram 2.3. Halal certification	Definition of halal, haram, syubhat, and makruh Halal and haram products according to quran and hadith How to take care of MUI halal certification

Source: (Antara et al., 2016; Chen & Volpe, 2002; Mandell & Klein, 2009) developed.

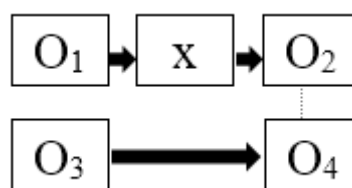
Technique of data collection used test method. This test used the Guttman scale to get a firm answer to the problem asked (Sugiyono, 2015). The yes or no choice test was used to measure Islamic financial literacy and halal literacy before and after the implementation of the Islamic financial and halal products education module. This test data was used to determine the level of Islamic financial literacy and halal literacy. The steps in preparing Islamic financial literacy and halal literacy tests consisted of composing a test grille previously has been researched by (Antara et al., 2016; Chen & Volpe, 2002; Mandell & Klein, 2009).

The first part of the test contained the identity of respondents such as name, gender, educational background, type of business and other questions relating to the identity of the respondent. In Part Two there were 3 main measurements of Islamic financial literacy and halal

literacy consisting of 40 questions. Questions about Islamic financial literacy knowledge, which consisted of 20 questions. Indicators contained in the question included general knowledge of finance, savings and loans, insurance and investment. This question was adopted from research conducted by (Antara et al., 2016; Chen & Volpe, 2002; Mandell & Klein, 2009 which was adapted to everyday language.

The question of halal literature consisted of 20 questions adapted from the study of (Antara et al., 2016) Indicators contained in the question included raw materials, management, production processes, and halal trade which were adapted to the everyday language. Questions used yes and no answers to reduce bias in the measurement. The measurement technique used in this question was an assessment based on the number of total questions answered correctly by the respondent.

In the evaluation stage, two groups were used as a comparison of Islamic financial literacy improvement and halal literacy between MSMEs using modules and not. Therefore, the experimental designs was used as in Figure 1.



**Figure 1.** Design of experiment with control group. Pre-test-Post-test Control Group Design

In Figure 1,  $O_1$  was the initial capability of the experimental group MSMEs perpetrators. Letter X was the provision of treatment in the form of Islamic Financial Literacy and Halal Product Education Module, while  $O_2$  was the ability of MSMEs perpetrators after being trained by using Islamic Financial Literacy and Halal Product Education Module. Then  $O_3$  was the initial capability of the control group MSMEs and  $O_4$  was the ability of MSMEs perpetrators after following training without using Islamic Financial Literacy and Halal Product Education Module.

From the test results obtained scores before and after the application of the module. The score was tested for normality. Normality test was used to determine the data was normally distributed or not. In this study the normality test used IBM SPSS Statistics 20. The result of normality test used results on kolmogorov-smirnov. Data was said to be normal if the significance value obtained was greater than  $\alpha = 0.05$  (Sign >> 0.05). Score data before and after the application of the modules also tested its homogeneity. Homogeneity test was intended to determine the similarity of data variance or called homogeneity test. Data was said to be homogeneous if the significance value obtained was greater than  $\alpha = 0.05$  (Sign >> 0.05).

The normal and homogeneous distribution data would be tested with Paired T-test. The use of this test was based on the consideration that in this model trial the researcher wanted to compare the mean of the experimental group with the control group, and compare the condition before being treated after treated. The test criteria were given if the significance (Asymp sign) was less than 0.05 (Sign < 0.05) meant that there was a difference of average between Islamic financial literacy and halal literacy of MSMEs perpetrators before using Islamic Financial Literacy and Halal Product Education Module and after using Islamic Financial Literacy and Halal Product Education Module. Conversely, if the significance was more than 0.05 (Sign >> 0.05) meant there was no difference in average between Islamic financial literacy and halal literacy of MSMEs perpetrators.

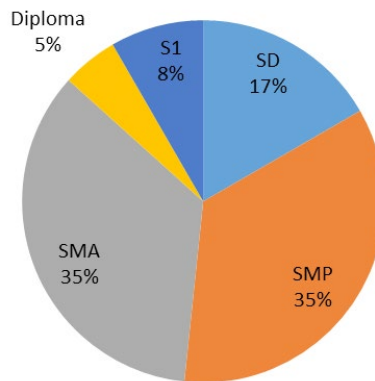
## RESULTS AND DISCUSSIONS

Evaluation stage was conducted to know the impact of module usage on Islamic financial literacy and halal literacy level of MSMEs perpetrators. The evaluation was performed with Post-test which compared to Pre-test score with paired T-test. The effectiveness test was applied to

MSME perpetrators who participated in training by using Islamic Financial Literacy and Halal Product Education Module. Post-test Question was similar to the Pre-test question which was 40 yes and no questions.

Evaluation conducted included product effectiveness test on research subjects which was conducted between June-July 2017 and conducted at a meeting of the community in the Special Region of Yogyakarta. The subjects of trial test in the Evaluation stage were the participants of MSMEs members of the economic empowerment program of Dompot Dhuafa Yogyakarta who have attended the training, namely 60 MSMEs perpetrators with 30 control groups and 30 other experimental groups. The control group was the perpetrators of MSMEs that used the module for the training and the experimental group was the perpetrators of MSMEs who did not use educational module during the training.

Measurements were made to 60 MSMEs perpetrators built by Dompot Dhuafa who joined in Paguyuban Warung Beres and Institut Mentas Unggul. The perpetrators of SMEs came from all districts and cities in the Special Region of Yogyakarta. The highest education of SMEs was S1 with 8%, and the highest proportion were 35% of high school and junior high school graduates.



**Figure 2.** Educational Background of MSMEs perpetrators

Source: field data processed, 2017

In table 2, the Pre-test average score was only 30. The maximum score was only 62.5 from the ideal score of 100. The data distribution showed the normal data and the homogeneous variant. The results of Pre-test test showed the correct answer distribution of 40 tested questions. The test results showed that the level of Islamic financial literacy and the halal literacy of MSMEs perpetrators was still low. The average comparison of Pre-test and Post-test scores of MSME perpetrators were categorized in free and control groups. The Pre-test and Post-test results were tested for its normality and homogeneity.

**Table 2.** Pre-test and Post-test Result of Islamic Financial Literacy and Halal Literacy

	Control			Free		
	Islamic Financial Literacy	Halal Literacy	Total	Islamic Financial Literacy	Halal Literacy	Total
<i>Pre</i>	28.7	21.2	24.9	31.3	36.7	34.0
<i>Post</i>	44.5	36.8	40.7	35.7	38.3	37.0

Source: field data, 2017

The SPSS output in Table 3 showed a significance value of 0.667 greater than 0.05. The result of normality test with Kolmogorov Smirnov showed that the tested data had normal distribution. The SPSS output in table 4 showed the significance level of post-test score from the control group,

0.211 > 0.05. The results showed that post-test data between the control group and the free group had the same variant or could be called that the data was homogeneous. The test results showed that the data was normally distributed and had homogeneous variants.

**Table 3.** The Result of Normality Test

N		Unstandardized Residual
		30
Normal Parameters <sup>a,b</sup>	Mean	0E-7
	Std. Deviation	10.46491613
Most Extreme Differences	Absolute	0.133
	Positive	0.133
	Negative	-0.067
Kolmogorov-Smirnov Z		0.726
Asymp. Sig. (2-tailed)		0.667

Source: field data processed, 2017

**Table 4.** The Result of Homogeneity Test (post-test score of control group)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1678.542	12	139.878	1.514	0.211
Within Groups	1570.625	17	92.390		
Total	3249.167	29			

Source: field data processed

The data would be tested with a Paired T-test to determine its effectiveness. Data which was normally distributed and having homogeneous variance were then analyzed by paired T-test. The result of paired T-test from table 5 showed that there was difference of Islamic financial literacy and halal literacy scores before using module and after using module. Table 5 showed the statistical test with the results of hypothesis 0 rejected which meant there was a change to the average of Islamic financial literacy and halal literacy scores before using the module and after using the module.

**Table 5.** The Result of Paired t Test

Paired Differences		t	df	Sig. (2-tailed)	
95% Confidence Interval of the Difference					
Upper					
Pair 1	Before - After	-13.67604	-16.096	29	0.000

Source: field data, processed in 2017

Measurements conducted in this study gave an illustration that islamic financial literacy of MSMEs perpetrators was initially low. This was according to (Boisclair, Lusardi, & Michaud (2017) could have an impact on an uncomfortable retirement. Some individuals relied on the help of financial advisors and ignoranced about basic financial concepts could be attributed to lack of pension planning and lack of wealth. Financial education programs could help increase savings and financial decision-making, but much more could be done to improve the effectiveness of this program.

The implementation of Islamic finance and halal product education module for MSMEs in training could increase the average of Islamic financial literacy in the control group by 5.8 points which was originally 28.7 to 44. The Islamic financial literacy score of the control group proved to be higher than the increase of free group score that did not use the education module. The

average increase in the score of Islamic finance literacy was only 4.4 points, initially 31.3 to 35.7. The findings as presented by Doi, McKenzie, & Zia, (2014); Koh & Lee, (2010), which showed that financial education could have a major impact when it was given when it could be taught, but the impact varied greatly with who got the training.

The use of modules proved to increase the level of literacy, according to the findings of Sunarsih, Rahmawati, & Qomaruzzaman (2013) which indicated that the module could be a help tool in the delivery of materials and sharia values aimed at improving the ability of participants. In this study, the educational background did not significantly influence the increase of literacy. The findings showed that improvement was influenced by module usage and was not influenced by educational background.

Information processing theory could provide guidance that a learning process that would increase knowledge required a strategy. A teaching material module was one of the strategies that could be used. The existence of Islamic financial management literacy and halal literacy modules could facilitate the respondents to remember various materials that have been obtained during following the training. If the perpetrators of MSMEs forgot the material that has been obtained, they could directly open the module provided during the training.

Modules were helpful to keep perpetrators' memory about Islamic and halal financial management knowledge inherent. So as to make a real difference to the Islamic and halal literacy from before and after the training with a given module. In this way to improve the literacy of Islamic financial management and halal could be developed various sharia modules as a guidance in a training.

The results of research could be the basis that the preparation of modules with the theme of sharia was important to be done in order to facilitate the education of values to the perpetrators of MSMEs. The use of modules in this study was expected to provide knowledge of good financial management of MSMEs so that the perpetrators of MSMEs could manage their family finances better so that the savings have increased (Bernheim & Garrett, 2003).

## CONCLUSIONS

The results of statistical tests show significant value, so it can be concluded that the use of Islamic Financial Literacy and Halal Products Education Module can increase the Islamic financial literacy and halal literacy of MSMEs Perpetrators. Increased Islamic financial literacy and halal literacy can be seen from the average score before and after the use of Islamic financial literacy and halal literacy learning module. Suggestions that can be given are the perpetrators of MSMEs can attend Islamic literacy and halal literacy training that provides training material modules. The government is expected to facilitate the creation of training modules related to Islamic financial literacy and halal literacy so that many modules can be accessed by MSMEs and the wider community. Further research can apply this research by increasing the scope of the respondents studied.

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