
Analysis of the Awareness Level of Islamic Economics Doctoral Students at the State Islamic University of North Sumatera in Using Halal Products

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ABSTRACT

Access to halal products or food is very easy in Indonesia, so consumers do not pay too much attention to the halalness of a product. Halal awareness is needed to answer the needs of Muslims for halal products. The purpose of this research is to analyze halal awareness and the factors that influence it. WarpPLS 7.0 program is used to help analyze the effect of the variables studied. Structure Equation Modeling (SEM-PLS) analysis was used in this quantitative type of research with doctoral students of Islamic economics at the State Islamic University of North Sumatra as the sample. The results showed that the religiosity variable had a significant effect on halal awareness, the halal certificate variable and the knowledge variable also had a significant effect on halal awareness. Together, the three exogenous variables have a significant influence on the endogenous variables.

Keywords : Awareness, Knowledge, Religiosity, Halal Certificate

JEL Code:D13, L11

1. Introduction

The halal industry is one of the fastest growing businesses in the global market (Bashir, 2019). Currently, the concept of sharia, especially halal products, is being discussed and is becoming a trend in society, especially in Indonesia (Tri Ratnasari et al., 2019). The large influence of consumers on the consumption of halal products, especially food and beverages, has created new challenges for all manufacturing organizations, especially small and medium-sized companies (Elias et al., 2017). As the country with the largest Muslim population in the world, Indonesia has enormous potential in optimizing the halal industry (Utomo et al., 2020).

To answer the needs of Muslims for halal products, the halal market has emerged as a promising place for the global market. The halal market is valued at US\$2.107 billion and is expected to increase to US\$3.007 billion in 2023 (Reuters, 2018). The report estimates that global Muslim spending across the lifestyle sector was US\$2.1 trillion in 2017, while the Islamic finance sector has total assets of US\$2.4 trillion. Food and beverage led Muslim spending by category at US\$1.3 trillion, followed by clothing and apparel at US\$270 billion, media and entertainment at US\$209 billion, travel at US\$177 billion, and spending on medicines and cosmetics respectively. US\$87 billion and US\$61 billion, respectively (Reuters, 2018). (Asnawi et al., 2018) in their research recorded that Muslim consumers contributed US\$ 1.128 billion or 16.7% of global spending in 2015 and grew to 16.9% in 2020 or US\$ 1.585 billion.

Halal awareness in consumers will encourage them to seek sufficient information about the products to be used (Harahap, 2021). In Indonesia, the consumer halal awareness level index is 94.91 with a very good category. Halal awareness is supported by a religious belief index of 96.61 with a very high category, a health index (89.83), halal certification (84.71), and a good exposure index (78.72) (Dilham et al., 2018 and Kurniawati & Savitri, 2020). There are various factors that influence awareness, research results (Hasibuan et al., 2019) state that awareness is caused by knowledge and belief. Furthermore (Izzudin, 2018) states that Muslim awareness is marked by knowledge about the process of slaughtering, food packaging, and food hygiene in accordance with Islamic law.

Indonesia as the world's largest Muslim country certainly has a different perspective compared to other countries in viewing halal products, because access to halal products or food is very easy in Indonesia, consumers may not pay too much attention to the halalness of a product (Setiawan, 2019). Therefore, it is important to analyze the awareness of using halal products in Indonesia, especially among intellectuals. Doctoral students in Islamic Economics are Muslim intellectual candidates who certainly have knowledge and information and practice religious teachings, so it is necessary to analyze their level of awareness in using halal products.

2. LITERATURE REVIEW

Halal is defined as everything that is allowed or accepted by Muslims (Awan et al., 2015). Food products in Islam can be separated into categories between halal and haram, it becomes very important for Muslim customers to know the category of products they buy and use (Eliasi J.R., 2002). Where the Islamic principles related to halal and haram are human relations with God. Halal products are products that can be consumed and do not result in sin and torment (Nurhayati & Hendar, 2020).

Awareness of using a product is the ability to understand, feel and be aware of a product (Rachmawati et al., 2020). So that awareness of a product is an emotional perception that connects consumers with certain products. Halal awareness is a religious way that incorporates religious values into itself. People who have intrinsic halal awareness, they make sure what they eat is really halal (Kirana et al., 2015).

In QS. Al-Maidah verse 88 which means: "And eat lawful and good food from what Allah has provided for you, and fear Allah in whom you believe." clearly provides provisions regarding a Muslim to consume. A person's tendency to make a decision to make a purchase is influenced by information from his religious identity (Sudiro, 2017). The difference in the level of religiosity possessed by a religious adherent is influenced by internal factors and external factors. (Vanany et al., 2020) in their study reveals how religion shapes and influences consumer food choices and religion also has an impact on consumers' likes and dislikes which are reflected in attitudes and behavior.

Knowledge of a product is an important factor in consumer decision making, this can affect how consumers access the product (Said et al., 2014). Nowadays, consumers lose their ability to distinguish whether a product has been processed according to Islamic Sharia principles (Verbeke et al., 2013). Consumers must change their perception of products that claim to be halal. In local markets with short supply chains, consumers rely on personal trust when choosing products according to Halal principles. For example, consumers only buy from local butchers they know and trust. In a global market, consumers must turn to institutional trust by relying on limited information

provided on product packaging such as logos and Halal certification (Sayogo, 2017). Furthermore, it is said that sufficient information about the product will help consumers to make a decision to use the product.

Halal-certified food is a requirement for a Muslim as part of a religious obligation (Aziz & Chok, 2013). Determination of halal certification or logo/label on products is categorized as dharuriyyah benefit (Ilyas, 2018). Halal certification on product packaging represents product quality standards based on Islamic food standards (Muhamad et al., 2017). LPPOM MUI as an institution formed to guarantee the halalness of a product in Indonesia. In an effort to provide protection to consumers, each product is given halal certification (Faidah, 2017).

There are many studies that analyze the factors that influence awareness of using halal products and with various gaps, such as different variables with different results. As research (Ishaq, 2017) shows that identity has a significant effect on halal awareness, while religiosity and halal assurance labels have no significant effect on halal awareness. Next to investigate the determinants of halal meat consumption in an international Muslim student population in China, (Sherwani et al., 2018) with their findings, positive personal, personal beliefs, and perceived control predict awareness to eat halal meat. Furthermore (Asnawi et al., 2018) perceived behavioral control and religiosity are significant predictors of intention to consume halal products. other variables such as halal certification, halal awareness and trust have no effect on interest in using halal products while religiosity variables are significant in influencing consumers to buy halal products (Setiawan, 2019).

3. METHOD

Partial least square analysis Structure Equation Modeling (PLS-SEM) was used in this study. PLS-SEM is used to analyze variables that cannot be measured directly by considering measurement error. The random doubling method can overcome the assumption of normality and the requirement for a minimum number of samples. The research sample consisted of 60 respondents who were doctoral students in Islamic Economics at the State Islamic University of North Sumatra. WarpPLS 7.0 program was used to assist the analysis in this study. Where this program can identify nonlinear relationships between latent variables and correct the path coefficient values based on these relationships, where this program is the first software that can do this.

There are four variables in this study, namely halal awareness, religiosity, halal certificate (halal label/logo) and knowledge. Following are the definitions and measurements of each variable:

Variable	Operational definition	Measurement Scale
religiosity	It is the extent to which an individual is committed to the teachings of the religion he adheres to	Likert scale
Halal Certification (Halal Label/Logo)	Is a halal certificate or logo found on products provided by related parties	Likert scale
Knowledge	Is an understanding of the halalness of a product based on subjective interpretation.	Likert scale
Halal Awareness	Is an encouragement (motive) for knowledge, belief, experience or getting information that the use of the product can provide benefits	Likert scale

4. Results and Discussion

4.1. Results

The results of the analysis using WarpPLS 7.0 on the fit indices and p-value model show ten fit indicators. The p values are given for the APC and ARS indicators which are calculated by resampling estimates, this is necessary because both are calculated as the average of the parameters. After the evaluation, it can be seen whether the model fits or is suitable/supported by the data with p values for APC and ARS must be less than 0.05 so that it can be interpreted as significant. The average path coefficient (APC) is 0.263 with a P value = 0.007 , this value is above the requirements above. While the Average R-squared (ARS) is 0.132 with a P value = 0.072 , slightly above the requirements but still within tolerance. So it can be said that the data used in this study has a model fit in Table 1.

Table 1. The Model Fit Indicators

Model fit and quality indices -----
Average path coefficient (APC)=0.263, P=0.007
Average R-squared (ARS)=0.132, P=0.072
Average adjusted R-squared (AARS)=0.085, P=0.125
Average block VIF (AVIF)=1.113, acceptable if <= 5, ideally <= 3.3
Average full collinearity VIF (AFVIF)=1.025, acceptable if <= 5, ideally <= 3.3
Tenenhaus GoF (GoF)=0.195, small >= 0.1, medium >= 0.25, large >= 0.36
Sympson's paradox ratio (SPR)=1.000, acceptable if >= 0.7, ideally = 1
R-squared contribution ratio (RSCR)=1.000, acceptable if >= 0.9, ideally = 1
Statistical suppression ratio (SSR)=0.000, acceptable if >= 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)=0.667, acceptable if >= 0.7

Sources : Warp PLS Application (2021).

To see whether the data in this study is affected by multicollinearity, it can be seen from the AFVIF value with the requirement that the value must be less than 5. The Average full collinearity VIF (AFVIF) value is 1.025, where the value is smaller than 5 so that the research data is free from multicollinearity problems. . Another fit indicator used to measure the explanatory power of this model (explanatory power) is the value of the Tenenhaus GoF (GoF) with a value of , small >= 0.1, medium >= 0.25, large >= 0.36 . From the analysis above the rated Tenenhaus GoF by 0195 , which means the explanatory power of this research in the small category. The value of Sympson's paradox ratio (SPR) in this study is 1,000, acceptable if >= 0.7, ideally = 1 , this reflects that the path coefficients of the two variables and the correlations associated with these two variables do not have different signs, with the understanding that the model is free from problems. Sympson's paradox .

The path coefficients and p-value tests in this study present the results of the estimated path coefficients with the following values:

Table 2. The Path coefficients

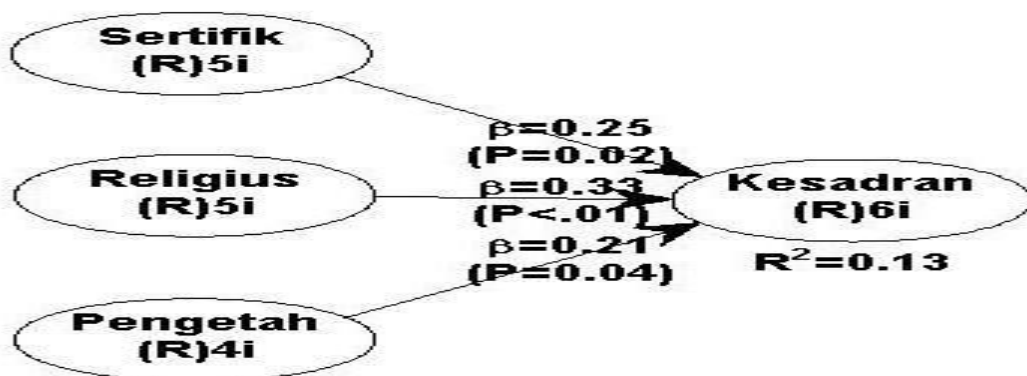
Path coefficients -----				
	Kesadra	Sertifi	Religiu	Pengeta
Kesadra		0.247	0.326	0.215

P values

	Kesadra	Sertifi	Religiu	Pengeta
Kesadra		0.021	0.003	0.039

Sources : Warp PLS Application (2021).

The p value of the column shows the value of the predictor latent variable while the row value shows the latent variable of the criterion. The path coefficient of the effect of the halal certification variable on awareness of using halal products is 0.247 and is significant at 0.021. Furthermore, the religiosity variable on the awareness variable is 0.326 with a significance level of 0.003 and the knowledge variable coefficient on awareness of using halal products is 0.215 with a significance level of 0.039. This means that all predictor variables in this research model affect the criterion variables with a significance level below 5%. While the value of R-squared coefficients is 0.132, which means that together the latent predictor variables affect the criterion variable by 13.2%. For more details, it can be seen from the picture in the following research model:



The combined loadings and cross-loadings output in this study is used to test the convergent validity of the measurement instrument (questionnaire) or test the outer model. Value Combined loadings and cross-loadings outer passed the test models with significant p value <0,05. There are three measurement instruments with a p-value above the requirements, namely in KH 2 with a p-value of 0.062, KH 3 with a p-value of 0.422, R5 with a p-value of 0.393, which means that the three questionnaires in this study are invalid and can be discarded from the measurement instrument. . While the other 13 measurement instruments have a value that meets the provisions of 0.05, so that the thirteen questionnaires can be said to have passed the convergence test.

Table 2. The Combined loadings and cross-loadings

	Kesadra	Sertifi	Religiu	Pengeta	Type (a)	SE	P value
KH_1	0.431	-0.197	0.211	-0.117	Reflect	0.111	<0.001
KH_2	-0.188	0.204	0.197	-0.037	Reflect	0.121	0.062
KH_3	-0.025	-0.118	-0.281	0.399	Reflect	0.128	0.422
KH_4	0.686	-0.173	-0.145	-0.003	Reflect	0.101	<0.001

KH_5	-0.780	-0.100	-0.116	0.014	Reflect	0.098	<0.001
KH_6	0.586	0.275	-0.088	0.113	Reflect	0.105	<0.001
SH_1	0.158	0.690	-0.273	-0.073	Reflect	0.101	<0.001
SH_2	-0.089	-0.821	0.049	0.032	Reflect	0.097	<0.001
SH_3	0.413	-0.297	-0.463	0.069	Reflect	0.116	0.007
SH_4	0.038	0.414	0.075	0.045	Reflect	0.112	<0.001
SH_5	-0.342	0.215	0.271	0.364	Reflect	0.120	0.039
R_1	-0.058	-0.098	0.301	0.130	Reflect	0.116	0.006
R_2	-0.077	-0.032	-0.724	-0.068	Reflect	0.100	<0.001
R_3	-0.122	0.019	0.777	-0.028	Reflect	0.098	<0.001
R_4	0.313	-0.007	0.212	-0.299	Reflect	0.120	0.041
R_5	0.296	0.208	-0.035	0.088	Reflect	0.128	0.393
P_1	0.082	0.122	-0.058	0.482	Reflect	0.109	<0.001
P_2	0.014	-0.252	-0.120	0.614	Reflect	0.104	<0.001
P_3	0.140	-0.210	-0.091	-0.667	Reflect	0.102	<0.001
P_4	0.087	-0.085	0.079	0.519	Reflect	0.108	<0.001

Notes: Loadings are unrotated and cross-loadings are oblique-rotated. SEs and P values are for loadings. P values < 0.05 are significant.

Sources : Warp PLS Application (2021).

Output correlation among latent variables reports the correlation coefficient between latent variables and their significance at p value. The requirement used is that the average variance extracted (AVE) square root must be higher than the correlation between latent variables in the same column. The discriminant variable of the halal certificate construct has been met with an AVE value of 0.540 which is greater than the value of the other construct variables. For the Awareness variable the value is 0.524, the religiosity variable is 0.503 and the knowledge variable is 0.575 with each variable having a greater value than the other construct variables in each column. So that this research is free from discriminant validity problems. In addition, the p value for correlations can be used as a discriminant validity requirement provided that the p value must be 1. The output p value for correlations shows that all variables have a value of one.

Table 3. The Correlations among latent variables

* Correlations among latent variables and errors *				

Correlations among l.vs. with sq. rts. of AVEs				

	Kesadra	Sertifi	Religiu	Pengeta
Kesadra	0.524	0.079	0.058	0.030
Sertifi	0.079	0.540	-0.182	-0.013
Religiu	0.058	-0.182	0.503	-0.030
Pengeta	0.030	-0.013	-0.030	0.575
P values for correlations				

	Kesadra	Sertifi	Religiu	Pengeta
Kesadra	1.000	0.546	0.660	0.822

Sertifi	0.546		1.000	0.163		0.922
Religi	0.660	0.163			1.000	0.819
Pengeta	0.822	0.922		0.819		1.000

Sources : Warp PLS Application (2021).

4.2. Discussion

Awareness of using halal products is an encouragement or motive that can lead to the benefit of consuming. A person's religiosity can encourage awareness in using halal products. It is proven by the results of this study which show that the religiosity variable can significantly affect awareness in using halal products. The halal certificate contained in each product shows the halalness of the product. So that the halal certificate becomes a motive for Islamic economics doctoral students in their awareness of using halal products. This is in accordance with the results of research which proves that halal certification has a significant effect on awareness of using halal products.

The status of a doctoral student in Islamic economics at the State Islamic University of North Sumatra with a campus with a religious background, especially Islamic economics, certainly has knowledge of the halalness of a product. This knowledge becomes the basis of analysis in determining which product to use which is driven by self-awareness. The knowledge variable owned by the respondents has a significant influence on their awareness of using halal products. Furthermore, together the variables of religiosity, halal certificate and knowledge can affect awareness of using halal products.

5. Conclusion

The output of the WarpPLS program using the SEM-PLS analysis method in this study provides information and proves the hypothesis. Where the religiosity variable has a significant effect on the awareness variable using halal products. The Halal certificate variable is proven to have a significant effect on the halal awareness variable. Furthermore, the knowledge variable also has a significant influence on the awareness variable using halal products. The three exogenous variables in this study together affect the endogenous variables. The consistency of the variables included in the model proved to have a significant effect in different research locations.

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