

Investigating factors of the purchase intention of slaughterhouses for Halal Certification in Yogyakarta, Indonesia



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Abstract The majority of Indonesia's population adheres to Islam at 87.2%. The large number of adherents of Islam affects the number of requests for halal products, especially broiler meat in the Special Region of Yogyakarta. This is supported by the large number of Chicken Slaughter Houses (CSH) with a total of 1,232 in the Special Region of Yogyakarta. However, only 49 slaughterhouses have been certified halal by *Majelis Ulama Indonesia* (MUI). This is not proportional to the amount of CSH. The purpose of this study is to investigate the factors that influence the intention of CSH owners to make halal certificates using the Theory of Planned Behavior (TPB) model with the addition of religiosity and knowledge factors using purposive sampling method. The questionnaire was distributed face to face that targeted a minimum of 100 respondents with the specific criteria of CSH with age minimum 2 years old. The collected data was examined using the SPSS application, which is a multiple linear regression module. This study uses the variables religiosity, knowledge, perception control, subjective norms, attitudes, and intentions. The conceptual model consists of 2 models. The first model is the influence of religiosity factors, and knowledge of the attitude of CSH owners in making halal certification. The second model is attitudes, subjective norms, and perception control of CSH owners in making halal certification. The results showed that the knowledge and religiosity factors had a significant positive effect on the attitude of CSH owners in making halal certification. Attitude factors, perception control, and subjective norms have a significant effect on the intention of CSH owners in making halal certification. These factors can simultaneously explain the attitude of CSH owners in making halal certification by 2.9%, and the intention of CSH owners in making halal certification is 7.5% while the rest is influenced by other factors.

Keywords: Halal certification, slaughtering house, purchase intention

1. Introduction

The term "halal" is an Arabic term derived from the Arabic language, meaning "permitted or legitimate." Muslims have significant awareness of the necessities for devouring only Halal food (Hosseini et al., 2020; Ali et al., 2016). All religions restrict food choices in some way. For example, all major religions, including Islam, Hinduism, Judaism, Jewishism, Buddhism, and Christianity, create influential and effective roles for prohibiting specific foods (Suleman et al., 2021). For a Muslim community, halal food and its consumption pattern have become significant (Bonne et al., 2009). Religious perception is an essential fact that influences consumption (Essoo & Dibb, 2004). In numerous communities, religion plays a significant role in molding food choices (Dindyal, 2003; Musaiger, 1993). The impact of food consumption and religion depends on the individual and on how many individuals interpret, practice, and comply with or follow the teaching of their faith (belief) (Sack, 2001).

The majority of Indonesia's population (87.2%) adheres to Islam, with a total of 209,000,000 people. This number certainly has an impact on the demand for food products (Wati & Ridlwan, 2020). This has an impact on meeting the needs of the community, one of which is the fulfillment of animal protein derived from healthy and halal meat. These include beef cattle, goats, sheep, pigs, buffaloes, horses, rabbits and poultry (chickens, ducks, quail and pigeons). Based on data from the Livestock Service Office of D.I., Yogyakarta states that the poultry industry sector is one of the sectors that influences the fulfillment of healthy meat, especially broilers, every year (Data Dinas Peternakan, 2021). The majority of the meat produced in the attic sector consists of broiler meat as opposed to meat from other animals. The production data for each animal are shown in Figure 1.

Figure 1 shows that there was a significant increase in the number of broilers compared to the other broiler populations. These data were taken from data from the D.I. Yogyakarta Province Animal Husbandry Service in 2019, where



there was a significant increase of 88% (Data Dinas Peternakan, 2021). The high population of broiler chicken meat is influenced by the large number of requests from the public, which is supported by the large number of CSHs in the Province of the Special Region of Yogyakarta, which is divided into five districts. The CSH business has quite bright prospects because RPA has the advantages of fast growth, high meat production, readiness to be slaughtered at a relatively easy age, and the ability to produce soft fibrous meat (Christiana Simanjuntak, 2018).

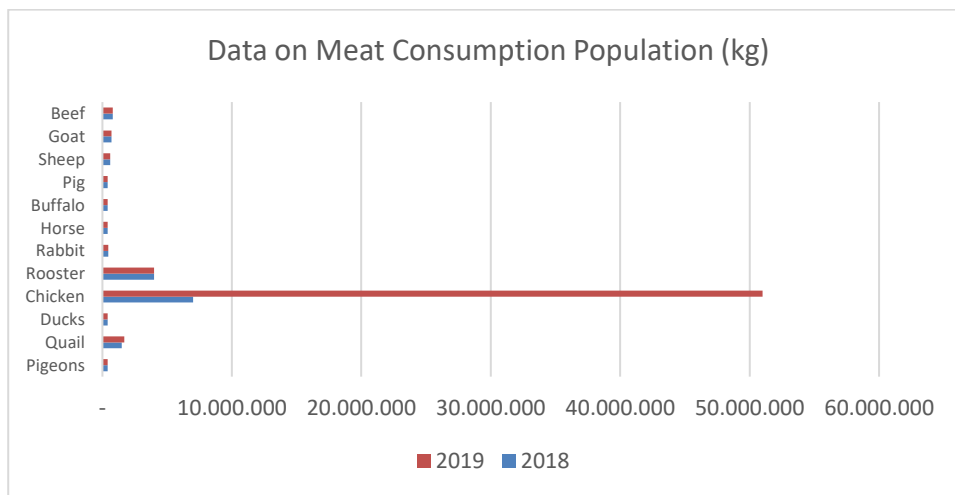


Figure 1 Number of meats produced in D.I. Yogyakarta.

Producers always prioritize halal and product feasibility for consumption by the public, which is a form of producer support to maintain the quality of the products that are traded (Anggrasela, 2021; Faishal et al., 2023). This study is in line with a study conducted by Ali (2016), which states that manufacturers or companies try to meet production material quality standards by improving the Halal Assurance System (Faishal et al., 2024). The policy of the Minister of Religion of the Republic of Indonesia number 519 of 2001 explains that the Indonesian Ulema Council (*Majelis Ulama Indonesia*-MUI) has the authority to carry out food inspections and certify halalness in the form of halal certification before goods are to be marketed in Indonesia. The existence of halal certification facilitates the process of business licensing and the inclusion of a halal logo to maintain consumer loyalty (Farhan & Ardiansyah, 2016). Based on the results of the observations and interviews with the Yogyakarta Special Region Animal Husbandry Service, there are currently no data for the entire CSH in the Yogyakarta area. The existing data are in the form of large-scale CSHs, which are influenced by the number of CSHs that change every year. The results of interviews with CSH owners in Bantul Regency show that the registration process for halal certification will incur a large fee and that the processing is quite complicated; therefore, many CSH owners are not interested in halal certification. This is reinforced by the results of an interview with LPPOM MUI Yogyakarta that not all CSHs are registered and have carried out halal certification and attended training. In 2021, there were 47 CSHs with halal certification, and the active period of certification was extended.

Based on the results of interviews with CSH owners, halal certification was not extended because the government did not pay enough attention to routine checks. This makes CSH owners unwilling to extend and suggests that halal certification is not necessary. In addition, there are several other factors, such as high price, complexity, and long production time, that have an impact on CSH owners, who feel uncomfortable making and extending halal certification.

According to the results of interviews with the Animal Husbandry Service, the number of CSHs in each district is always changing, especially in the Special Region of Yogyakarta. This is influenced by factors such as product selling prices that do not match production prices. Supervision of the slaughtering process for each district is different, but there are not a few CSHs that are not supervised by the Animal Husbandry Service. This is due to the lack of adequate facilities and natural resources; thus, the certainty of halal for the slaughtering process lies with each CSH.

The results of interviews with the Animal Husbandry Service in five districts in the Special Region of Yogyakarta revealed that there were 1,232 CSHs recorded from five districts. This number consists of large and small CSHs scattered in each region in markets, households, and companies. Moreover, 47 CSHs underwent halal certification, and the data were obtained from LPPOM MUI in 2021. The distribution of halal-certified CSHs is divided as follows.

Not all CSHs are listed in the LPPOM MUI Yogyakarta data because not all of them register halal certification and extend halal certification. The negative impact of not carrying out halal certification is that it can unsettle the community and decrease confidence in buying halal products (Agustina et al., 2019). Based on the existing problems and references from various literature studies, this research aims to examine the factors that influence the intention of CSH owners in making halal certifications for CSH, both registered and unregistered LPPOM MUI Yogyakarta. There is little research that discusses making certification, especially CSH, so it is necessary to design programs to increase the intention of CSH owners to make

halal certification. The research was conducted in the districts of Bantul and Sleman because the largest population is in these locations.

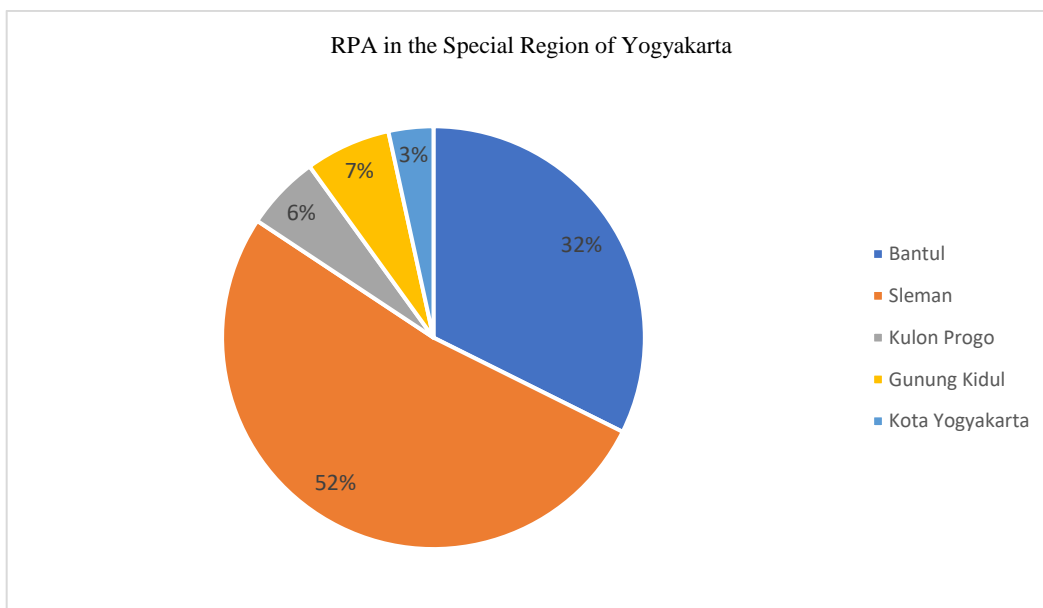


Figure 2 Data CSH at D.I.Yogyakarta.

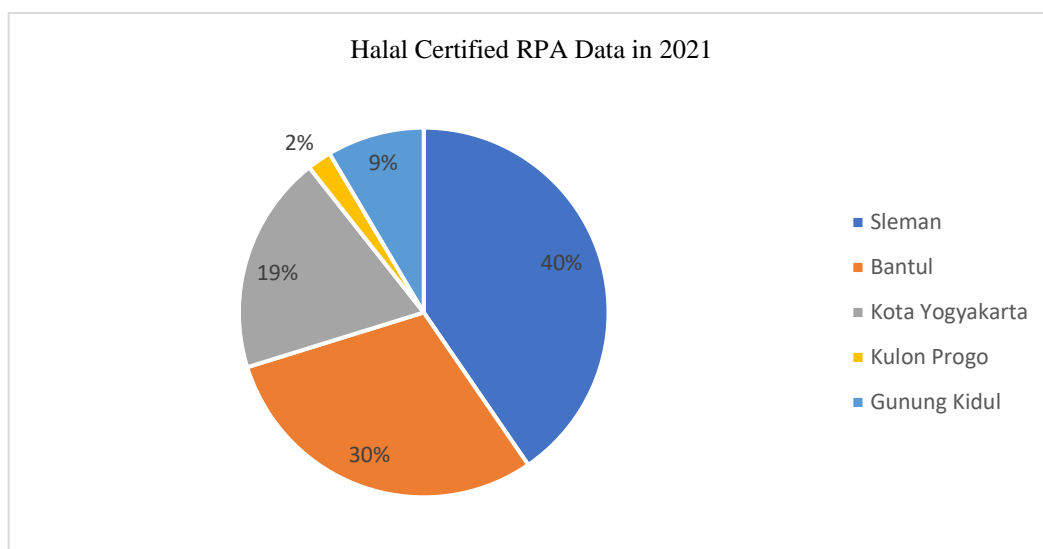


Figure 3 Halal-certified CSH.

2. Theoretical framework and development of hypotheses

A study by Suhaimi Abdul Rahman (2015) was conducted to increase knowledge about attitudes toward and intentions to choose Halal products. The method used is descriptive statistics, with the object of research being Muslims over the age of 18 who are in Malaysia. The data collection techniques involved the use of questionnaires with 110 respondents. This research provides insight for Malaysian consumers to determine whether knowledge and religiosity are related to consumer attitudes toward halal cosmetic products. The results of this study provide information to consumers that they tend to have a stronger attitude toward halal food products than cosmetic products.

Research by Rohmatun & Dewi (2017) was conducted to determine how much influence knowledge, religiosity and attitudes had on the purchase intentions of Indonesian Muslim youth for halal cosmetic products. The method used is quantitative descriptive, with the object of research being Indonesian Muslim youth aged 17-25 years who use halal cosmetic products. The data were collected using a random sampling method by distributing questionnaires to 500 respondents. The results of the study show that knowledge and religiosity have a significant partial or simultaneous effect on attitudes. Knowledge, religiosity and attitudes have a significant effect on the intention to buy halal cosmetic products partially or simultaneously.



The theory of planned behavior (TPB) was developed by Ajzen and Fishbein from theory reasoned of action (TRA), which is used to research human behavior (Ajzen, 1991). Ajzen argues that TRA has not been able to explain behavior that is not fully under someone's control.

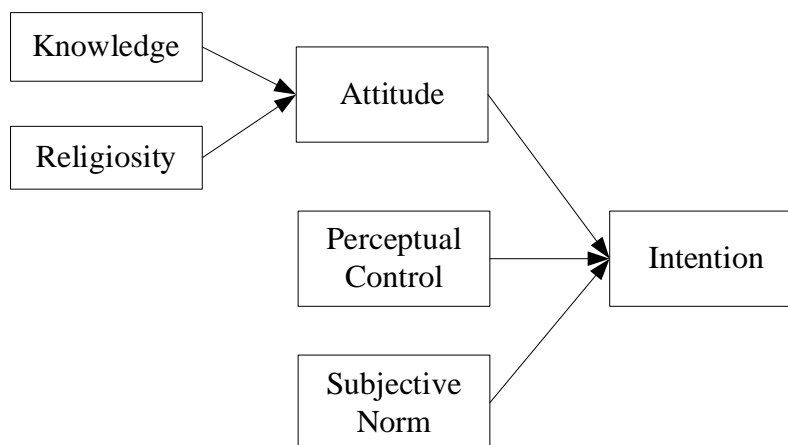


Figure 4 Model of the Study.

2.1. Intention

Intentions are individual thoughts about doing something before making a certain decision (Nasabi et al., 2017). Intention is used as an individual measure of doing something; the greater the intention is, the more it will affect each individual in carrying out a certain action (Divianjella, 2018).

2.2. Attitude

Attitude is a feeling and a tendency that can be seen based on liking or disliking something (Mintardjo et al., 2016). Attitudes can serve as guidelines for people to behave consistently toward the same object (Harun et al., 2019).

2.3. Subjective Norms

Subjective norms are social pressures experienced by a person whether or not they are involved in certain behaviors. This shows what individuals have to do (Harun et al., 2019). Therefore, each opinion can be identified from the importance for individuals influencing each individual in making decisions (Ariffin et al., 2019).

2.4. Perceptual control

Perceptual control is the feeling of each individual regarding the ease and difficulty of realizing a certain behavior, Ajzen (2011). Perceptual control can change depending on the situation and the type of behavior carried out by each individual (Rois, 2016). A person's self-confidence can be influenced by individual abilities and courage in dealing with the problems they face (Setiawan, 2019).

2.5. Religiosity

Religiosity is the degree to which a person is obliged to practice religious values in everyday life. (Hafaz et al., 2019). Religiosity is an individual or group belief that cannot stand alone, which means that aspects of personality must be trained, and the value of religiosity comes from the religious teachings that a person adheres to or believes in (Jannah, 2019). In addition, religiosity is the first step in creating religious characteristics that are based on religious values and character education (Retnasari et al., 2019).

2.6. Knowledge

Knowledge is something that is known whether seen or based on information heard throughout one's life. (Royani Pasi, 2017). Knowledge usually refers to the facts, feelings and experiences of a particular person or group (Abd Rahman et al., 2015).

3. Methodology

This study uses primary and secondary data. The data were processed and analyzed quantitatively and descriptively to provide an overview and facilitate an explanation of the phenomena that occur in CSH DIY. Multiple linear regression

analysis was used to determine how much influence the independent variables had on the dependent variable on the decisions of the CSH owners regarding halal certification. Data collection was carried out from September to October 2021. The participants in this study were CSH owners in the Bantul and Sleman Regencies. This study uses the Panned Behavior Theory approach with the development of previous research by Islam (2018) and Asnawi et al. (2019).

The data were obtained from the MUI and the Animal Husbandry Office in each district of Yogyakarta. The data collection technique was carried out by interviewing the MUI, the Animal Husbandry Service in five districts, and the owner of the CSH. This study aimed to obtain detailed and clear information directly regarding the problems associated with the linkage of at least the CSH carrying out halal certification.

Data collection was carried out by distributing 100 questionnaires to respondents who owned CSH in the Bantul and Sleman Regencies. The questionnaires were divided into two groups, namely, 38 questionnaires for CSH owners in Bantul Regency and 68 questionnaires for CSH owners in Sleman Regency. The sample size was determined using the Slovin method, which was previously calculated with an estimated maximum of 100 questionnaires (Yulianto, 2014).

3.1. Variable development

This study uses dependent and independent variables. The dependent variable consists of attitudes and intentions, while the independent variables consist of knowledge, religiosity, subjective norms, perceptual control, and attitudes. Knowledge and religiosity are used to measure how much influence the attitude of the CSH owner has on halal certification. Meanwhile, attitudes, subjective norms, and perception control measure the intention of CSH owners in making halal certifications. The purpose of this study was to determine the effect of religiosity, knowledge, attitudes, subjective norms, and perception control on the intention of CSH owners to make halal certifications. This study uses a Likert measurement scale that measures perceptions through the distance intervals between alternative answer choices.

3.2. Analysis Techniques

Multiple linear regression was used to determine the relationships and influences between the independent and dependent variables, and SPSS 20 software was used for analysis via F and T tests.

4. Results

The data were collected from CSHs, both halals certified and not yet halal certified, in the Bantul and Sleman Regencies, as shown in Table 1. The initial data needed are the total CSH population in the Special Region of Yogyakarta, which is divided into 5 regencies: Bantul, Sleman, Yogyakarta city, Gunung Kidul, and Kulon Progo. Researchers obtained CSH population data based on data from the Animal Husbandry Service in five districts. The following are the CSH data and the distribution of the number of questionnaires according to the Slovin method.

Table 1 Summary of the demographic distribution of the surveyed population.

No.	Area	Number CSH	Presentation
1.	Bantul	396	38%
2.	Sleman	636	62%
Total		1032	100%

4.1. Data Processing Model 1

The results of data processing using SPSS 20 software were tested with regression equation model 1, and the results are shown in Table 2. The following are the results of regression equation model 1. By examining the effect of the Beta on Standardized Coefficients, we obtain the regression equation.

Table 2 The results of regression equation model 1.

Model		Unstandardized Coefficient	
		B	Std.Error
1	(Constant)	10,690	2,147
	Knowledge	0,086	0,54
	Religiosity	0,033	0,105

According to the results of the multiple linear regression model 1 test, the constant value is 10.690, the coefficient of knowledge is 0.086, and the coefficient of religiosity is 0.033. Therefore, it can be concluded that for this study, a linear regression model with the following equation was used:

$$Y1 = 10,690 + 0,086 X1 + 0,033 X2$$



The linear regression model equation has the following interpretation:

- Y : Attitude
- X1 : Knowledge
- X2 : Religiosity

Based on the results of the linear regression equation, the coefficient value for the constant value (Y) is 10.690, meaning that the value is the value of the attitude variable not influenced by the knowledge and religiosity variables. The regression equation above shows a positive value of the knowledge variable (X1) that is equal to 0.086 and positive religiosity (X2) of 0.033, meaning that there is an increase in the knowledge variable (X1) and religiosity (X2) on the attitude variable (Y).

$$Y1 = 10,69 + 2,15 + 0,825$$

$$Y1 = 4,555$$

Based on the results of the Y variable, the calculation of the multiple linear regression model test is 13.655, which is divided by the number of attitude indicators (Y) of 3; the result is 4.555 or rounded to the same scale as 4. Furthermore, measurements are carried out based on real data conditions in the field by calculating the average value of respondents' answers. Then, the simple linear regression model testing equation is obtained as follows:

$$Y1 = 10,69 + 0,086 (17,9) + 0,033(19,7)$$

$$Y1 = 4,2931$$

Based on the value given by the respondent to all variables, the average is 4, and the average value given by the respondent is obtained when the attitude (Y) is 12.87. Then, the value is divided by the number of attitude indicators (Y), which is 3 so that the result is 4, 29 or rounded to the same scale as 4. This shows that the CSH owner agrees that attitudes can be influenced by knowledge and religiosity. Based on the results of the Y calculation, the following results are obtained:

1. If X = 1, the value of Y = 3.761 (scale 3)
2. If X = 5, the value of Y = 4.555 (scale 4)
3. If X = 17.9 and 19.7, the value of Y = 4.293 (scale 4)

Based on the attitude obtained using the model above, it can be seen that if X is 1, then the Y scale results are at a doubtful scale value (scale 3), and these results are very different from the real data calculations that have been carried out. If X is 5, then the results of the Y scale are on the agreed scale value (scale 4), and these results are in accordance with real data calculations of 4.29 or on a scale of 4 (agree), meaning that the CSH owner agrees that knowledge and religiosity affect attitudes. Therefore, if each variable increases by 4, then knowledge and religiosity increase by 13.655. When viewed from the Likert scale, this value is on the agreed scale. This means that the CSH owner agrees that the variables of knowledge (X1) and religiosity (X2) influence attitudes (Y).

4.2. Data Processing Model 2

The results of data processing using SPSS 20 software were tested with regression equation model 2, and the results are shown in Table 3. The following are the results of the Model 2 regression equation by looking at the beta on standardized coefficients; the regression equation is obtained:

Table 3 The results of the Model 2 regression equation.

Model		Unstandardized Coefficient	
		B	Std.Error
2	(Constant)	9,242	2,719
	Perceptual control	0,111	0,116
	Subjective Norm	0,291	0,139

The linear regression model equation has the following interpretation:

- Y : Intention
- X1 : Perceptual Control
- X2 : Subjective Norm

Based on the results of the linear regression equation, a constant value of 9.242 means that the value of the dependent variable is not influenced by the independent variable, meaning that the attitude of CSH owners toward halal certification does not take into account the control variables of perception, subjective norms and attitudes of CSH owners. The value of (X1) is 0.111, and that of (X2) is 0.291, which means that overall, the independent variables have a positive effect on the intention of CSH owners to make halal certifications. After testing the model, the results obtained for each variable on



intention (Y), while for all respondents answering the assumed variable value (X) strongly disagree, namely, 1, the total value obtained by X is 5, so that it can be assumed that the linear regression model is as follows:

$$Y_2 = 9,242 + 0,555 + 0,873$$

$$Y_2 = 2,9175$$

Based on the results of the calculation of the average model obtained in Model 2, the value given by respondents to all variables is an average of 2. Meanwhile, for the calculation of the results of the average value given by respondents, the attitude value (Y) is 10.67, meaning that CSH owners tend to disagree in terms of halal certification. If each variable increases in value by 2, the intention of the CSH owner will increase by 10.67. On the linkert scale, the value of 2.9175 is on a scale of disagreement, meaning that respondents do not agree that the independent variables (perceived control, subjective norms, and attitudes) affect the dependent variable (intention).

4.3. T Test Results

4.3.1. Model 1

A t test is used to test the independence of a variable in contributing to the dependent variable. The hypothesis in the test will be accepted if the significance value is <0.05 and the value of the calculated T value > T table and vice versa (Ghozali, 2017). The T table used in this test is $T_{table} = T(\alpha/2; n-k)$ or $T_{table} = (0.025; 98) = 1.9447$. The statistical test results are shown in Table 4.

Table 4 The results of the Model 2 regression equation.

Model	Standard Coefficient	t	Sig.
Beta			
1	(Constant)	4,978	0,00
	Knowledge	0,162	0,113
	Religiosity	0,032	0,752

1) Knowledge

The Knowledge variable has a significance value of 0.113 with a calculated T value of 1.600. Therefore, it can be concluded that if the significance value < alpha (0.0113 < 0.05) and T count < T table (1.600 < 1.9447), then Hypothesis 1 (H1) is rejected, meaning that the knowledge variable has no significant positive effect on the attitudes of CSH owners toward halal certification.

2) Religiosity

The Knowledge variable has a significance value of 0.752 with a calculated T value of 0.317. Therefore, it can be concluded that if the significance value > alpha (0.752 > 0.05) and T count < T table (0.317 < 1.9447), then Hypothesis 1 (H1) is rejected, meaning that the Religiosity variable has no significant positive effect on the attitudes of CSH owners in making halal certifications.

4.3.2. Model 2

The t test results for Model 2 are shown in Table 5.

Table 5 The results of the Model 2 regression equation.

Model	Standart Coefficient	t	Sig.
Beta			
2	(Constant)	3,399	0,001
	Perceptual Control	0,095	0,342
	Subjective Norm	0,207	0,040

1) Perceptual Control

The Knowledge variable has a significance value of 0.955 with a calculated T value of 0.342. Therefore, it can be concluded that if the significance value > alpha (0.342 > 0.05) and T count < T table (0.955 < 1.9447), then Hypothesis 1 (H1) is rejected, meaning that the perception control variable has no significant positive effect on the CSH owners' intention to make halal certifications.

2) Subjective Norms



The Knowledge variable has a significance value of 2.085 with a calculated T value of 0.040. Therefore, it can be concluded that if the significance value > alpha (0.040 < 0.05) and T count < T table (2.085 > 1.9447), then Hypothesis 1 (H1) is accepted, meaning that the subjective norm variable has a significant positive effect on the CSH owner's intention to make halal certification.

4.4. F Test Results

4.4.1. Model 1

F testing is used to determine whether the independent variables together or jointly affect the dependent variable (Ghozali, 2018). The results of the F test can be seen in Table 6.

Table 6 The results of the Model 2 regression equation.

Model		Df	Mean Square	F	Sig.
1	Regression	2	5,380	1,445	0,241b
	Residual	97	3,772		
	Total	99			

From the results of the F test that were carried out, as shown in Table 6, a significance value of 0.241 is obtained, and the calculated F is 1.445. Therefore, if 0.241 > 0.05 and 1.445 < 2.31, it can be concluded that Hypothesis 2 (H2) is rejected, meaning that the variables Knowledge and Religiosity simultaneously (together) have no significant effect on the attitude of CSH owners toward halal certification.

4.4.2. Model 2

The F test results for Model 2 are shown in Table 7.

Table 7 The results of the Model 2 regression equation.

Model		df	Mean Square	F	Sig.
2	Regression	2	19,164	2,817	0,065b
	Residual	97	6,803		
	Total	99			

From the results of the F test that were carried out, as shown in Table 7, a significance value of 0.065 is obtained, and the calculated F is 2.817. Therefore, if 0.065 > 0.05 and 2.817 > 2.31, it can be concluded that if Hypothesis 2 (H2) is accepted, the variables Perception Control, Subjective Norms, and Attitudes simultaneously (together) have a significant effect on the CSH owner's intention variable in making halal certification.

4.5. Determination Results

4.5.1. Model 1

The test results of the coefficient of determination are shown in Table 8. The correlation coefficient (R) is 0.170, and the R squared (R2) is 0.029 or 2.9%. This means that knowledge and religiosity variables affect attitudes by 2.9%. The remaining percentage of 97.1% is influenced by other variables not examined in this study.

Table 8 The results of the Model 2 regression equation.

Model	R	R Square	Adjusted R Square	Std.Error of the Estimate
1	0,170a	0,029	0,019	1,92924

4.5.2. Model 2

Table 9 shows that the correlation coefficient (R) has a positive value of 0.234, and the R squared (R2) is 0.055 or 5.5%. This means that the intention of CSH owners in making halal certifications is 5.5% influenced by perception control variables, subjective norms, and attitudes. The remaining percentage of 94.5% is influenced by other variables not examined in this study.

Table 9 The results of the Model 2 regression equation.

Model	R	R Square	Adjusted R Square	Std.Error of the Estimate
1	0,234a	0,055	0,035	2,60820



5. Conclusion

Based on the results of research that has been conducted regarding awareness of halal certification at CSH (Chicken Slaughterhouses) in the Bantul and Sleman Regencies, it can be concluded that knowledge and religiosity factors have a significant, but not significant, positive effect. This is shown by the finding that the level of knowledge and beliefs had an effect of 2.9% on the attitudes of CSH owners toward halal certification. Moreover, attitude factors, perceived control, and subjective norms have no significant positive effects. This is shown by the results of the level of attitude, perception control, and subjective norms of 7.5% on the intention of CSH owners to make halal certification. This finding is in line with previous research showing that consumer knowledge about halal certification contributes to a better understanding of the benefits and importance of halal products, which in turn increases positive attitudes toward these products (Hayat et al., 2015). In addition, religiosity also plays an important role in shaping attitudes toward halal certification. Consumers with high levels of religiosity tend to value and seek halal-certified products more because they view them as part of their religious obligations (Mukhtar and Butt, 2012). Hence, in the future, manufacturers and marketers of halal products, including CSH owners, should increase educational efforts regarding the benefits and importance of halal certification and integrate religious values into their marketing strategies to attract more religious consumers. In addition, future research needs to be conducted to examine other variables that may influence attitudes toward halal certification, such as cultural and social factors, as well as to conduct comparative studies in different regions with different Muslim populations.

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Ethical considerations

All respondents of this study were owners or chief managers. This research was conducted door to door, and all respondents agreed to provide data. Before completing the questionnaire, all respondents agreed to complete the questionnaire.

Conflict of Interest

The authors declare no conflicts of interest.

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