The Effects of Knowledge, Religiosity Value, and Attitude on Halal Label Reading Behavior of Undergraduate Students

Megawati Simanjuntak* and Muhammad Mardi Dewantara**

Halal label is a label on food that justified according to Islamic law, qualified and did not harm our health. The purpose of this research was to analyze the effect of intrinsic factors (individual characteristics and family characteristics), extrinsic factors, knowledge, religiosity and the attitude towards behavior of reading the halal label on food products of undergraduate students. This study used cross sectional study with survey method. The research involved 400 students of Bogor Agricultural University that were chosen by multistage random sampling with gender as a layer. There was significant difference between female and male in knowledge, religiosity value, and attitude in reading halal label, whereas the behavior in reading label had no significant difference. Age, religiosity value, and attitude were found affected significantly behavior of reading halal label on food products.

**Keyword:** attitude, behavior, halal label, knowledge, religiosity value

Introduction

As the world’s most populous Muslim country, Indonesia has the potential to become not only a major market but also a major producer of halal products (Soesilowati, 2010). Every year, food industries in Indonesia grow rapidly, that also mean big responsibility towards consumer protection. As a product characteristic, halal refers to the nature, origin and the processing method of food designated for Muslim consumers. Halal is a typical credence process attribute, thus an invisible and intangible quality characteristic that can hardly be evaluated or ascertained by individual consumers, even upon or after consuming the good. The result is potential quality uncertainty during the pre- and post-purchasing stage (Verbeke et al., 2013). Mohayidin and Kamarulzaman (2014) stated that certified halal food product gained the highest utility score and was the most important attribute. Law of The Republic of Indonesia Number 8 Year 1999 Chapter 4 concerning consumer protection explained that consumers have a right to obtain comfort, security and safety in using or consuming the goods and/or service.

Based on the Law of The Republic of Indonesia Number 8 Year 1999 article 8h explained that the producers are not allowed to produce and/or trade goods and/or services which do not follow halal production processes for products

* Corresponding author, Department of Family and Consumer Sciences, Faculty of Human Ecology IPB Bogor. E-mail: mega.juntakipb@gmail.com
** Department of Family and Consumer Sciences, Faculty of Human Ecology IPB Bogor. E-mail: muhammadmardidewantara@gmail.com
with halal label. But in reality, there are many manufacturers do not understand correctly the law of consumer protection. In addition there are many manufacturers have not aware the importance of halal certification; this is because the certificate is still intentionally for manufacturers who want to apply for halal certification. Based on data from National Agency of Drugs and Food (FDA), the numbers of registered products are 113,515 products, but only 41,695 products that have halal certificates by Indonesian Ulama Council. This means that only 36.73 percent of products in Indonesia have been registered Halal by Indonesian Ulama Council (Hakim, 2011). Entrepreneurs of small medium enterprises (SMEs) in food business in Indonesia who have heard of halal hub, have the intention to applying Halal certification for their food products, while Halal certificate for their product(s), self done record keeping and attained a certain level of education have significant different responses towards the Halal certification process (Mohani et al., 2013). Mohamed, Shamsudin and Rezai (2013) indicated that consumers are sensitive to the fact that any false information may result in the loss of their confidence level and it would also affect their intended purchasing decisions. Alam and Sayuti (2011) explain that it is necessary to have high understanding and knowledge as consumers to be able to choose halal foods.

Nayga (1999) concluded that the behavior of reading the label is influenced by the perceptions and belief of a person. Religion is one of the indicators that can be used to determine the attitudes, values and behavior of a consumer because religion is the most important factor in a culture. Religion plays an important role in influencing consumer behavior (Mukhtar and Butt, 2012; Khraim, 2010).

The above description showed lack of awareness, knowledge, and values of consumers in choosing and using a product. Especially Muslim consumers should pay attention of their consuming foods. Basically, many Muslim consumers were still eating foods that have not hold halal label on it. This is certainly a problem, because Muslims have to follow a set of dietary prescriptions, which is halal dietary (Jusmaliani, 2009). Therefore, the aims of this study was to: (1) analyze the differences of knowledge, religiosity values, attitudes, and behavior of reading the label halal food products from the perspective of gender, (2) analyze the influence of respondent characteristics, family characteristics, knowledge, religiosity values, and attitudes of respondents in reading the halal label on food products, and (3) analyze the influence of respondent characteristics, family characteristics, the knowledge, religiosity values, and attitudes towards nutritional information labels reading behavior.

**Literature Review**

According to Rahman et al., (2011), a good knowledge was influenced by the experience of information exposing about halal products. Rajagopal et al., (2011) in his study showed that the respondents that aware of the concept of halal still have low awareness and knowledge regarding of labeling and halal certification. Values and beliefs affected on how and what products that selected by the consumer. Jusmaliani and Nasution (2009) indicated that behavioural control and availability of halal meat have significant impact on intention to eat halal meat. Values shared by groups will affect consumer behavior (Rehman and Shabbir, 2008; Karayanni, 2010). Based on research by Senarath and Karunagoda (2012), 87.0 percent of respondents read the label on the package every time. There are 93.0 percent of respondents said that reading food labels is important, but only 12.0 percent of the 93.0 percent of respondents who read the label. Davies, MacPherson, and Froud (2010) stated that 52.0 percent of consumers in the UK read food labels. In this case the female consumers read food labels more often compared to men. In addition, there are many factors that influence the behavior such as read safety labels, country of origin, quality, labeling ethical, genetic modification information, and logo.

Nayga (1999) research results showed that the behavior of reading the label was influenced by the perceptions and beliefs of a person. Behavior of reading the label is an action before someone decides to purchase some products. Socio-economic conditions and education will affect personal perception of the importance of reading labels.
Yun Ma (2005) stated that the knowledge of consumers had different effects on their behavior, such as searching product information. Hong and Sternthal (2010) also stated that consumers who have more knowledge would affect the evaluation of the product attributes. Religiosity value is a personal commitment to religion as reflected in two aspects, cognitive and behavioral (Khraim et al., 2011). Mokhlis (2008) stated that religiosity would affect goals in life and personal responsibility to god, self, and others. The effects of religiosity on consumer behavior depends on personal level of religious commitment, or how important the values of religion in someone’s life. Religiosity may influence a person either cognitive or behavior. Study of Jamal and Shariffuddin (2014) concluded that religiosity have a positive relationship with intentions. Religiosity moderates the relationships between horizontal collectivism and intentions. Perceived value associates positively only with intentions to patronize stores and religiosity moderates this link.

Kahle et al., (2005) stated that the research on the value of religiosity was not widely raised in consumer research. However, some research raised religiosity to explain consumer behavior. It is caused by the assumption that religion and religiosity are the basis of social values in the society. Religiosity can be measured as a cognitive attitude of a person where the value of an individual religiosity may vary in accordance with their interests. Several studies have reported that religiosity is a factor that affects personality and behavior. Religiosity is also part of the strategy to adjust in certain circumstances. To measure the dimensions of religiosity, there are two approaches, i.e., internal religiosity and external religiosity.

Knowledge can influence consumer attitudes of a product (Retnaningsih, Utami, and Muflikhati, 2010). Hamdan et al., (2013) stated that knowledge (familiarity) of the processed foods was identified as the most influential factor in determining the purchasing decision among Muslim consumers. Karayanni (2010) also stated that there was a significant relationship between the value and the information searching process (label reading). In addition, the values held by groups will affect consumer behavior. Gender and education are the significant variables that affecting the behavior of reading labels (Hu, Adamowicz, and Veeman, 2006). Burapadaja, Jamroendarasame, and Sanguansermsri (2003) stated that the individual and environmental characteristics influence consumer behavior. Homer and Kahle (1988) stated that the value will affect the attitudes and attitudes will affect behavior. The hypothesis of this study was the knowledge would affect the religiosity value of religiosity and attitudes. Furthermore, the religiosity value and attitudes expected to affect the behavior.

Luthfi and Salehuddin (2011) found that Theory of Planned Behavior (TPB) is not completely valid to explain both the behavioral intention of Muslim consumers in Indonesia to seek information about the Halal certification of a product and to cancel their purchase if the product did not have Halal certification. Various socio-economic/demographic and attitudinal characteristics were found to significantly influence the likelihood of the respondents’ degree of confidence in the “halalness” of manufactured food products that carry the Halal logo. The older generation, particularly the rural folk, and those with higher education level and higher level of religiosity seemed to be likely less confident with the Halal labelled food products. Thus, most Malaysians are still unsure or do not have the full confidence in the Halal labelled food products with regard to its “halalness” (Shamsudin & Rezai 2013).

Methods

Types of Research

This study was using a cross-sectional study that carried out within a certain time on different objects and was not sustainable. This study was using a survey method. This study was located at the Bogor Agricultural University (IPB) campus in Dramaga, Bogor. The choice of research location was conducted intentionally based on the consideration that the IPB is one of the institutions in Indonesia, which play an active role in the development of food and agriculture through research and dissemination of information. In addition, the IPB students were taking many food products, especially products with more practical form of packaging.
Population and Sample

The population in this study was active undergraduate students (S1) of IPB and actively in the third, fifth, and seventh semester in academic year of 2013-2014. Total population in this study was 540 students. Respondents’ selection technique was using probability sampling, i.e., multistage random sampling based on nine faculties available at Bogor Agriculture University and based on gender. Nine faculties at Bogor Agricultural University, including the Faculty of Agriculture, Faculty of Veterinary Medicine, Faculty of Fisheries and Marine Sciences, Faculty of Animal Husbandry, Faculty of Forestry, Faculty of Agricultural Technology, Faculty of Mathematics and Natural Sciences, Faculty of Economics and Management, and Faculty of Human Ecology.

Based on Slovin’s formula, the amount of respondents should be 385 students as a minimal amount of respondents to be used in this research. The amount of respondents that were taken in this research was 400 students to minimize an error in data collection process. To decide the amount of respondents in each faculty, the propotional method was used. Proportion determination of respondents for each faculty was decided based on total student population of each faculty.

Data Types and Data Collection Techniques

Primary and secondary data were taken in this study. The primary data obtained from the self-report of respondents by using questionnaire that contains the variables examined in the study. These variables include intrinsic factors (age, sex, allowance, religion, family income, parental employment, parental education levels, and parental dependents), extrinsic factors (got information about label, attending the class of consumer subject and attending the class about label), knowledge, religiosity values, attitudes, and the halal label reading behavior. Secondary data obtained from other relevant parties such as the Directorate of Education Administration about the number of active students population at IPB in academic year of 2013-2014 and other information, such as books, journals, or other literature related to the research topic.

Instrument and Scale

The analysis was using descriptive and inferential. Descriptive analysis was used to identify the individual characteristics and the characteristics of the family. Knowledge variables were measured through 15 statements using a Guttman scale with two assessments with score one (1) and score zero (0).

Values variable in this study were measured using an instrument developed by Huefner et al., (2002). Values variable consisted of 20 questions and measured using a Likert scale with four assessments, which strongly disagree with score one (1), does not agree with a score two (2), agrees with score three (3), and strongly agree with score four (4). Attitude variable in this study were measured using instruments developed by Permatahati (2013), adapted from Simanjuntak (2014). Attitude variable declaration consists of 10 items measured using a Likert scale with four assessments, which strongly disagree with score one (1), does not agree with a score two (2), agrees with score three (3), and strongly agree with score four (4). Label reading behavior variable consisted of 15 items measured statements using a Likert scale with four assessments, i.e., never with score (1), rarely with score two (2), often with score three (3), and always with score four (4).

Instrument Test

Index of each variable was categorized into four categories include very less (score≤25), less (25 ≤score≤50), good (50 ≤score≤75), and excellent (score> 75). Instrument’s reliability for knowledge was 0.657 by removing nine statements, yielded 15 valid statements with validity value between 0.061 to 0.455. Reliability of value variables was 0.911 with 20 valid statements and validity value between 0.241 to 0.771. Reliability of attitude was 0.816 with 10 valid statements and the validity ranged between 0.384 to 0.726. Reliability of halal label reading behaviour was 0.8250 with 20 valid statements and validity value ranged from 0.352 to 0.670.

Data Analysis Methods

Data processing was performed using Microsoft Excel and Statistical Package for Social
Sciences (SPSS) 16 for Windows. Data analysis used in this research was descriptive analysis and inferential analysis. Descriptive analysis used to identify individual and family characteristic as an analyzed factors in this research, like intrinsic factor (age, sex, allowance, religion, family income, parental employment, parental education levels, and parental dependents) and extrinsic factors (got information about label, attending class of consumer subject and attending the lectures about label). Multiple linear regressions test was used to analyze factors that affected behavior of halal label reading. The factors were knowledge, religiosity value, and attitude. Some variables was non-metric variable such as gender, religion, join consumer class or information resources about label. Dummy was done on those variables by giving score 0 and 1 for every data category.

**Results and Discussion**

**Intrinsic and Extrinsic Factors**

Average ages of males were 20.34 (sd 1.04) and females were 20.20 (sd 1.00). Most of males (87.3 percent) and females (91.5 percent) are Muslims. More females (32.1 percent) attended more lectures about consumers than males (27.4 percent). Similarly, female (37.4 percent) were attending lecture of food label, more than males (24.8 percent). Males had pocket money with an average of Rp 930, 477.71 per month (sd = Rp328,115.14 per month), while the females had an average allowance of Rp1 009 053.50 per month (sd = Rp444,549.56 per month). An average food male was Rp 600,127 per month (sd = Rp213,262.17 per month) and for females wasa Rp598,111.11 per month (sd = Rp249,248.74 per month). Almost half of the mothers of males (46.1 percent) and more than half of mothers of females (59.5 percent) were housewives. Total of 43.3 percent of males father and females father (38.4 percent) had high education level (S1 / S2 / S3). More than half of the families of male (53.5 percent) had two people as family dependents, while 50.2 percent of females had three to five people as family dependents. Total of 60.5 percent of males who had family income by an average of Rp 4,421,182.80 per month (sd = Rp 4,516,158.28 per month), while as many as 53.1 percent of females had an average family income of Rp 5,284,156.61 per month (sd = Rp 5,072,867.66 per month). Independent t-test results between males and females showed significantly difference in the knowledge and family size.

**Knowledge of Halal Label**

More than half of males (56.7 percent) and almost half of females (44.4 percent) were categorized as well in term of knowledge about halal labeling in food product. Average knowledge score of male (69.11 ±13.65) was lower than the average scores of female (72.10 ±12.86) and independent t-test results showed significant differences between the scores of knowledge among male and female (p =0.027) (Table 1).

**Value of the Halal Label**

Nearly half of males (46.5 percent) had a value in good and excellent categories. More than half of female respondents (55.6 percent) had a value categorized as very good. The average score of the value of females (76.53 ±13:24) were higher than the average score of males (72.82 ±14:24). Independent t-test result showed significant differences between the scores of knowledge among male and female (p =0.009) (Table 2).

### Table 1. Distribution and statistical level of knowledge about the halal labeling

| Knowledge about the halal labeling | Male (n=157) | Female (n=243) | Total (n=400) |
|-----------------------------------|-------------|----------------|-------------|
| Very poor (score ≤ 25)            | 0.6         | 0.0            | 0.2         |
| Poor (25 <score ≤ 50)             | 11.5        | 9.5            | 10.2        |
| Good (50 <score ≤ 75)             | 56.7        | 44.4           | 49.3        |
| Very good (75 <score ≤ 100)       | 31.2        | 46.1           | 40.3        |
| Average ± SD                      | 69.11 ± 13.65 | 72.10 ± 12.86 | 70.93 ± 13.24 |
| Min- Maks                         | 20 – 100    | 30 – 100       | 20 – 100    |

Note: *significant at p<0.05
Attitude towards Halal Label

Attitude was an expression of how consumers feel about preferences of an object. In addition, it could also describe the attitude of consumer confidence in the various attributes and benefits of the product or object. More than half of males (58.6 percent) and females (54.4 percent) had an attitude towards halal food product labels in good category. Average scores of males (69.46 ±13.18) were lower than the females (73.36 ±12.91). In terms of attitude towards halal label, independent t-test indicated that there was significant different between males and females (p =0.004) (Table 3).

| Category of attitude on the halal label | Male (n=157) | Female (n=243) | Total (n=400) |
|----------------------------------------|-------------|----------------|---------------|
| Very poor (score ≤ 25)                 | 0.0         | 0.0            | 0.0           |
| Poor (25 < score ≤ 50)                 | 8.3         | 5.3            | 6.5           |
| Good (50 < score ≤ 75)                 | 58.6        | 54.4           | 56.0          |
| Very good (75 < score ≤ 100)           | 33.1        | 40.3           | 37.5          |
| Average ± SD                           | 69.46 ± 13.18 | 73.36 ± 12.91 | 71.83 ± 13.14 |
| Min – Max                              | 40 – 100    | 33.33 – 100    | 33.33 – 100   |

Independent t-test (p value) 0.004**

Note: **significant at p<0.01

Halal Label Reading Behavior

More than half (53.5 percent) males had a halal label reading behavior in low category. The same thing also happened to the group of females, almost half (48.1 percent) of females had a halal label reading behavior in low category. The average score of halal labels reading behavior of females (48.66 ±12.10) higher than the average of males (48.93 ±11.78). In the term of halal label reading, there was no significant difference between male and female (p =0.826) (Table 4).

Factors Affecting Knowledge and Religiosity Value

Before performing regression testing, the research data must fulfill the requirements of classic assumption test. Classic assumption test consisted of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. Based on normality test result, known that research data were not normally distributed. Ways to cope the abnormality with the data was using “ln”. The result of multicollinearity with religiosity tolerance value was more than 0.1 and religiosity value in Variance Inflation Factors (VIF) was less than 10. In this category. The average score of halal labels reading behavior of females (48.66 ±12.10) higher than the average of males (48.93 ±11.78). In the term of halal label reading, there was no significant difference between male and female (p =0.826) (Table 4).
research, the variables have been free from het-
eroscedasticity, this can be seen from points on
the scatterplot spread above and below the Y
axis. Variables in this research have been free
from autocorrelation, this can be seen from re-
ligiosity value Durbin-Watson on regression
model of knowledge, religiosity value, attitude,
and behavior of halal reading on first and sec-
ond model were 1.110, 0.577, 2.021, and 1.771.
This model regression was said free from au-
tocorrelation because religiosity value Durbin
Watson closed to +2.

Multiple linear regressions was used to ana-
lyze the factors that affect the knowledge and
values of the respondents regarding the halal
label on food products. Regression test results
showed that the value (β = 0.888; sig≤0.01) and
a significantly positive influence on respon-
dents’ attitudes regarding the halal label on food
products. That was, the value of 94.3 percent
affected the attitudes of the respondents regard-
ing the halal label on food products (Table 5).

Factors Influenced Attitudes toward Halal
Labels

The result of multiple linear regression anal-
ysis showed that the value (β = 0.888; sig≤0.01) and
a significantly positive influence on respondents’ attitudes regarding the halal label on food
products. That was, the value of 94.3 percent
affected the attitudes of the respondents regard-
ing the halal label on food products (Table 5).

Factors Influence Halal Label Reading Be-
havior

The result of multiple linear regression anal-
ysis showed that age (β = 0.712; sig≤0.05) neg-
atively affected the halal label reading behavior.
That is, the effect of age by 9.6 percent against
the lawful behavior of reading halal labels of
food products. Religion (β = 0.712; sig≤0.01) had
significantly dan positively influenced on
the halal label reading behavior. The religion
influenced the reading behavior at 12.9 percent.
In addition, attitude (β = 0.712; sig≤0.01) also
positively and significantly affected the halal
label reading behavior. The attitude was affect-
ing the halal label reading behavior at 82.8 per-
cent (Table 5).
Discussion

The aim of this study was to analyze the effect of knowledge, attitudes, and values of the halal label reading behavior. The study found no association between knowledge and behavior of reading the halal label of food products; it was because the knowledge of variables was influence the behavior through the mediator, such as consumer attitudes. Masood et al., (2013) through his research stated that a good knowledge of halal products was positively related to attitude of using the lawful products. However, the regression test found that knowledge did not affect attitudes. According to Ahmad, Rahman, and Rahman (2014), knowledge did not have a significant effect on attitudes. The results in this study also showed that knowledge had a positive relationship with gender and influenced by age and religion. This was consistent with the results of the research of Unusan (2005), which stated that the gender had a positive relationship with knowledge. Rahman et al., (2011) stated that a good knowledge influenced by experience and exposure to information about halal products. In this study, most of respondents are Muslim, so they are more exposed to information about halal products. Based on the results of independent t-test, male and female respondents’ knowledge was significantly different. Knowledge of female was better than male. According to Lynn and Irving (2002), knowledge of women was higher in terms of health and fashion than men.

Values affected the behavior of reading the label halal food products. The religiosity value of a person would affect the attitude of someone who then attitudes would affect a person’s behavior (Homer and Kahle, 1988). In this study, values were influenced by religion, it was presumably because religion affected personal behavior based on the values that are believed by the respondents. Kahle et al., (2005) clearly stated that religion affected consumer value because every person with a different religion would have a different value as consumers. Value of the male and female respondents had a significant difference. More than half of the female were categorized into very good value with a score of between 75 and 100. It could be seen from the answers of the respondents strongly agreed in answering related to the value of the halal label, including concern for halal food, belief in eating halal food, and confidence for the food that is halal. Mahmoud (2012) in his research stated that the value of women-owned was better than those of men.

The results showed that attitude was only influenced by the values and it’s influenced on behavior. Mukhtar and Butt (2012) stated that the value in this case was subjective norms and religious beliefs in a person positively influenced consumer attitudes towards halal products. However, the results of the regression test of attitudes toward behaviors was different with the results found by Burapadaja, Jamroendararasame, and Sanguansermsri (2003) in his research that stated that consumer attitudes did not directly affect the behavior of reading labels. Based on the results of independent t-test, female had an average score of attitude that was larger than the male. This caused significant differences between the attitudes of female and male. Senarath and Karunagoda (2012) also stated that the attitude of female respondents were better than males because females were more concerned about food labels. Burapadaja, Jamroendararasame, and Sanguansermsri (2003) also stated that individual and environmental characteristics influenced consumer behavior in reading the label. Khraim research results (2010) showed that religion played an important role in influencing consumer behavior. Patel (2011) also stated that religion affected consumer behavior. This was consistent with a recent study that found religion affected the behavior of reading the labels on food products halal. That is, if a person is Muslim, then the behavior of reading the halal labels become better. In addition, the results of this research found that attitudes were strongly and positively affected behavior. This is consistent with the study of Homer and Kahle (1988), which stated that behavior was influenced by attitudes positively. In contrast to previous results, age was negatively affected reading behavior of halal label. This was in line with Lizárraga et al., (2007) which stated that a younger person would seek more information before decided to purchase some products. In addition, older people had less capacity in searching more specific information before purchasing a product.
Based on the results of independent t-test on behavioral variables, it was found no differences between halal label reading behaviors of male and female. This was in contrast to Furlow and Knott (2009) which showed that female consumers always tend to read labels. Overall, the regression model showed the influenced factors on the behavior of reading halal labels of food products by 71.2 percent. The remaining 28.8 percent was influenced by other variables. As explained by Haryani and Yusoff (2011), factors that influenced the purchase of halal label products were habits, behavior controls and religious values. Other than that, the results of Jusmaliani’s (2009) study showed that the relationship between behavioural control and behaviour suggest that consumers are more likely to engage in behaviours they feel to have control over and are prevented from carrying out behaviours over which they feel to have no control.

The results of this research may be useful to provide information about the influence of knowledge, religiosity values, and attitudes towards halal label reading behavior in students. It was hoped that this study is useful for the development of science in the field of consumer science. This research was expected that marketers could comply with the laws and regulations to not harm consumers. For the government, this study was expected to be more assertive in enforcing government laws and punish marketers that disobey the rules that have been defined.

Limitations of this study were characteristic of individuals who are likely homogeneous and lack of control during the process of self-report because it was not completed in time and at the same place. Furthermore, a time constraint in completing the questionnaire was also a limitation in this study. Besides, the respondents who are not Muslim that was chosen by random sampling could be a limitation for this research because non-Muslim generally did not pay attention to halal label. Different result might be obtained if all respondents are Muslims.

**Conclusion**

Female and male respondents had good knowledge and attitude, as well as their values. In the other hand, the halal label reading behavior was relatively poor. There were significant differences in the variables of knowledge, religiosity values, and attitudes, in which the average total scores of these three variables were higher in female than male respondents. Religion influenced the halal label reading behaviors. Knowledge of halal labels in Muslim respondents was better than non-Muslims. Religiosity values influenced attitudes in reading halal label. The better of the respondents, the better of the attitudes it becomes. Age affected the halal label reading behavior. Younger respondents had a label reading behavior better than the older. Religion and attitudes influenced the behavior of reading the label halal food products. Muslim respondents had a halal label reading behavior better than the non-Muslim religious respondents. Moreover, the better the attitudes of respondents, the better of the halal label reading behavior of respondents.

This study showed that the behavior of respondents in the halal label reading was still not good. Therefore, suggestions for consumers were to be more aware and understand their rights and responsibilities as consumers. Advice to the government through the Ministry of Trade of the Republic of Indonesia and the relevant agencies such as the Food and Drug Administration (FDA) was to educate the public by creating a program to introduce more information regarding food products, so that consumers in Indonesia are more concerned in reading the food labels. In addition, the Ministry of Trade and the Indonesian Consumers Foundation (YLKI) were advised to educate and provide information on the rights and obligations of consumers through mass media. Future studies were expected to analyze other factors that could affect the behavior of reading labels which have not been studied in lawful in this study such as habits, behavior control, religious values, and others. Moreover, in this study there was no effect of knowledge on attitudes. This was presumably due to the characteristics of individuals who tend to be homogeneous. Therefore, further research was recommended to conduct similar studies with diverse characteristics of respondents. In addition, further research is also suggested that self-report done at the same time in order to better explain the data obtained by both respondents.
References

Ahmad, A.M., Rahman, A.A., & Rahman, S.A. (2014). Assessing knowledge and religiosity on consumer behavior towards halal food and cosmetic product. International Journal of Social Science and Humanity, 5, 10-13. doi: 10.7763/IJSSH.2015.V5.413

Alam, S.S., & Sayuti, N.M. (2011). Applying the Theory of Planned Behavior (TPB) in halal food purchasing. International Journal of Commerce and Management, 21, 8-20.

Burapadaja S, Jamroendararasame, B., & Sanguansermsri, J. (2003). Determinants of consumer’s drug leaflet reading. CMU Journal, 2, 15-26.

Davies, P., MacPherson, K., Froud, E. (2010). Evidence review of public attitudes towards, and use of, general food labeling. Food Standards Agency. Retrieved from http://multimedia.food.gov.uk/multimedia/pdfs/revattitudeslabel.pdf

Furlow, N.E., & Knott, C. (2009). Who’s reading the label? Millennials’ use of environmental product labels. Journal of Applied Business and Economics. Retrieved from http://t.www.nabusinesspress.com/JABE/Jabe103/FurlowWeb.pdf

Hakim L. (2011) Stabilisation of Halal Assurance System (SJH) towards World Class Halal Institute. Retrieved from pdf

Hamdan, H., Issa, Z. M., Abu, N., & Jusoff, K. (2013). Purchasing decisions among Muslim consumers of processed halal food products. Journal of Food Products Marketing, 19, 54-61. doi:10.1080/10454446.2013.724365

Haryani, S., & Yusoff, M. (2011). Factors that affect purchasing of halal label product a study at UUM Muslim Consumer.(Thesis). University Utara Malaysia, Kedah.

Homer, P.M., & Kahle, L.R. (1988). A structural equation test of the value-attitude-behavior hierarchy. Journal of Personality and Social Psychology, 54, 638-646.

Hong, J., & Sternthal, B. (2010). The effects of consumer prior knowledge and processing strategies on judgments. Journal of Marketing Research, 47, 301-311.

Hu, W., Adamowicz, W.L., & Veeman, M.M. (2006). Labelling context and reference point effects in models of food attribute demand. American Journal of Agricultural Economics, 88, 1034-1049.

Huefner, J.C., Parry, B.L., Payne, C.R., Otto, D.S., Huff, S.S., Swenson, M.J., Hunt, & H.K. (2002). Consumer retaliation: Confirmation and Extention. Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior, 13, 114-127.

Jamal, A., & Sharifuddin, J. (2014). Perceived value and perceived usefulness of halal labeling: The role of religion and culture. Journal of Business Research.

Jusmaliani, J., & Nasution, H. (2009). Religiosity aspect in consumer behaviour: Determinants of halal meat consumption. ASEAN Marketing Journal, 1, 1-11.

Kahle, L.R., Kau, A.K., Tambyah, S.K., Jun, S.J., & Jung, K. (2005). Religion, religiosity, and values: Implications for consumer behavior. Paper Presented at the Australian and New Zealand Marketing Academy Conference.

Karayanni, D.A. (2010). Cluster analysis of physician’s values, prescribing behavior and attitudes towards firms’ marketing communications. International Journal of Customer Relationship Marketing and Management, 1, 18. doi: 10.4018/jermm.2010100104.

Khraim, H. (2010). Measuring religiosity in consumer research from an Islamic perspective. Journal of Economic & Administrative Sciences, 26, 52-78.

Khraim, H.S., Khraim, A.S., Al-Kaidah, F.M., & AL-Qurashi, D. (2011). Jordanian consumer’s evaluation of retail store attributes: The influence of consumer religiosity. International Journal of Marketing Studies, 3, 105-116.

Lizárraga, M.L.S.A., Baquedano, M.T.S.A., & Elawar, M.C. (2007). Factors that affect decision making: Gender and age differences. International Journal of Psychology and Psychological Therapy, 7, 381-391.

Luthfi, B.A., & Salehuddin, I. (2011). Marketing impact of halal labeling toward Indonesian Muslim consumer’s behavioral intention based on Ajzen’s Planned Behavior Theory: Policy capturing
studies on five different product categories. *ASEAN Marketing Journal*, 3, 35-43.

Lynn, R., & Irwing, P. (2002). Sex differences in general knowledge, semantic memory and reasoning ability. *The British Psychological Society*, 93, 545-556.

Mahmoud, A.B. (2012). The role of gender in Syrian consumers’ beliefs about and attitudes towards online advertising. *European Journal of Economics*, 47, 90-99.

Masood, I., *et al.* (2013). Evaluation of Knowledge, Attitude, and Perception Regarding Halal Pharmaceuticals, Among General Medical Practitioners in Malaysia. *Journal of Archives of Pharmacy Practice*, 4, 092-096.

Mohamed, Z., Shamsudin, M. N., & Rezai, G. (2013). The effect of possessing information about halal logo on consumer confidence in Malaysia. *Journal of International Food & Agribusiness Marketing*, 25, 73-86.

Mohani, A., Hashanah, I., Mazlina, M., & Hadri, K. (2013). Indonesian small medium enterprises (SMEs) and perceptions on halal food certification. *African Journal of Business Management*, 7, 1492-1500.

Mohayidin, M.G., & Kamarulzaman, N.H. (2014). Consumers’ preferences toward attributes of manufactured halal food products. *Journal of International Food & Agribusiness Marketing*, 26, 125-139.

Mokhlis, S. (2008). Consumer religiousity and the importance of store attributes. *The Journal of Human Resource and Adult Learning*, 4, 122-133.

Mukhtar, A., & Butt, M.M. (2012). Intention to choose halal product: The role of religiosity. *Journal of Islamic Marketing*, 3, 108-120.

Nayga, R.M. (1999). Toward an understanding of consumer’s perceptions of food labels. *International Food and Agribusiness Management Review*, 2, 29-45.

Patel, M. (2011). Influence of religion on shopping behavior of consumers-an exploratory study. *Journal of Research in Commerce & Management*, 1, 64-78.

Permatahati, D.I. (2013). Relationship model of lifestyle, group, and attitude towards packaging food purchase. (Case: Housewife in Urban and Rural area of Bogor) (Unpublished thesis). Department of Family and Consumer Sciences. Faculty of Human Ecology. Bogor Agricultural University.

Rahman, A.H.A., Ahmad, W.I.W., Mohammad, M.Y., & Ismail, Z. (2011). Knowledge on halal food amongst food industry entrepreneurs in Malaysia. *Journal of Asian Social Science*, 7, 216-221. doi:10.5539/ass.v7n12p216.

Rajagopal, S., Ramanan, S., Visvanathan, R., & Satapathy, S. (2011). Halal certification: implication for marketers in UAE. *Journal of Islamic Marketing*, 2, 138-153. doi 10.1108/17590831111139857.

Rehman, A., & Shabbir, M.S. (2010). The relationship between religiosity and new product adaption. *Journal of Islamic Marketing*, 1, 63-69. doi 10.1108/17590831011026231.

Retnaningsih, Utami, P.W., & Muflikhati, I. (2010). Factors Analysis that affect attitude and behavior of buying non-original book for undergraduate student of IPB. *Jurnal Ilmu Keluarga dan Konsumen*, 3, 82-88.

Rezai, G., Mohamed, Z., & Shamsudin, M.N. (2012). Assessment of consumers’ confidence on halal labelled manufactured food in Malaysia. *Pertanika Journal of Social Science & Humanity*, 20, 33-42.

Senarath, S.N., & Karunagoda, R.P. (2012). Consumer attitude towards labelling of genetically modified food in Sri Lanka. *Tropical Agricultural Research*, 23, 283-288.

Simanjuntak, M. (2014). Level of empowered consumer and consumer empowerment strategy (Unpublished doctoral dissertation). Bogor Agricultural University, Bogor.

Soesilowati, E.S. (2010). Business opportunities for halal products in the global market: Muslim consumer behaviour and halal food consumption. *Journal of Indonesian Social Science and Humanities*, 3, 151-160.

Unusan, N. (2005). Consumer food safety knowledge and practices in the home in the Turkey. *Journal of Food Control*. Retrieved from http://smas.chemeng.ntua.gr/ miram/files/publ_354_5_10_2005.pdf.
Verbeke, W., Rutsaert, P., Bonne K., & Vermeir I. (2013). Credence quality coordination and consumers’ willingness-to-pay for certified halal labelled meat. *Meat science, 95*, 790-797.

Yun, M.A. (2005). *The role of consumer knowledge in consumer evaluations of brand extension* (Unpublished thesis). Auckland University of Technology : Auckland (AUS).