

VALIDITY AND RELIABILITY OF INSTRUMENTS OF KNOWLEDGE AND ATTITUDES AFFECTING DECISIONS TO PURCHASE OF HALAL COSMETIC PRODUCTS

Kesahan dan Kebolehpercayaan Instrumen Pengetahuan dan Sikap yang Mempengaruhi Keputusan Pembelian Produk Kosmetik Halal

JUNAINAH IDRIS

Kolej Universiti Islam Antarabangsa Selangor (KUIS)
junainah@kuis.edu.my

NADZIRAH MOHD FAUZI

Kolej Universiti Islam Antarabangsa Selangor (KUIS)
nadzirah@kuis.edu.my

MUHAMMAD FIRDAUS MUHAMMAD SABRI

Kolej Universiti Islam Antarabangsa Selangor (KUIS)
firdaussabri@kuis.edu.my

Abstract

This study looks at the measurement of consumer knowledge and attitudes on Halal cosmetic products. These measurements are important in influencing consumers to choose and make purchasing decisions. The knowledge construct includes the instrument of tacit knowledge which is the knowledge gained by consumers through their experience, thinking, competence, and commitment to Halal cosmetic products as well as explicit knowledge which is the knowledge gained through reading and researching data, documents, and records. The attitude construct includes two instruments, namely the expression of beliefs and the expression of feelings. Results from Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) conducted on 100 Muslim women in Selangor found that the instrument of expression of feelings is at a high level with load factor = 0.806 and communality = 0.705 followed by the trust expression instrument with load factor = 0.748 and communality = 0.712. explicit knowledge instrument with load factor = 0.733 and communality = 0.628 and tacit knowledge instrument with load factor = 0.707 and communality = 0.633. This explains that each item for the knowledge and attitude construct is very significant for use in this study. Specifications and methods of factor analysis are used to estimate the probability of a relationship between independent variables (observations) that is consumer knowledge and attitudes with purchasing decisions as dependent variables (latent). The results of the study found that the tacit and explicit knowledge instrument is an appropriate instrument to measure consumer knowledge about Halal cosmetic products while the instrument of expression of belief and expression of feelings is an appropriate instrument to measure consumer attitudes towards Halal cosmetic products.

Keywords: Consumer Behaviour, Halal, Cosmetic, Muslim Consumer, Tacit Knowledge, Explicit Knowledge

Abstrak

Kajian ini melihat kepada pengukuran pengetahuan dan sikap pengguna terhadap produk kosmetik Halal. Pengukuran ini penting dalam mempengaruhi pengguna untuk memilih dan membuat keputusan pembelian. Konstruk pengetahuan merangkumi instrumen pengetahuan tasit yang merupakan pengetahuan yang diperoleh pengguna melalui pengalaman, pemikiran, kecekapan dan komitmen mereka terhadap produk kosmetik Halal serta pengetahuan eksplisit yang merupakan pengetahuan yang diperoleh melalui pembacaan dan penelitian data, dokumen dan rekod. Pembinaan sikap pula merangkumi dua instrumen, iaitu ekspresi kepercayaan dan ekspresi perasaan. Hasil dari Analisis Faktor Eksploratori (EFA) dan Analisis Faktor Pengesahan (CFA) yang dilakukan ke atas 100 wanita Islam di Selangor mendapati bahawa instrumen ekspresi perasaan berada pada tahap tinggi dengan faktor muatan = 0.806 dan komunaliti = 0.705 diikuti oleh instrumen ekspresi kepercayaan dengan faktor muatan = 0.748 dan komunaliti = 0.712. instrumen pengetahuan eksplisit dengan faktor muatan = 0.733 dan komunaliti = 0.628 dan instrumen pengetahuan tasit dengan faktor muatan = 0.707 dan komunaliti = 0.633. Ini menjelaskan bahawa setiap item untuk pengetahuan dan konstruk sikap sangat signifikan untuk digunakan dalam kajian ini. Spesifikasi dan kaedah analisis faktor ini digunakan untuk menganggar kebarangkalian wujud hubungan diantara pemboleh ubah bebas (cerapan) iaitu pengetahuan dan sikap pengguna dengan keputusan pembelian sebagai pemboleh ubah bersandar (laten). Hasil kajian mendapati bahawa instrumen pengetahuan tasit dan eksplisit adalah instrumen yang sesuai untuk mengukur pengetahuan pengguna mengenai produk kosmetik Halal sementara instrumen ekspresi kepercayaan dan ekspresi perasaan adalah instrumen yang sesuai untuk mengukur sikap pengguna terhadap produk kosmetik Halal.

Kata kunci: Kelakuan Pengguna, Halal, Kosmetik, Pengguna Muslim, Pengetahuan Tacit, Pengetahuan Eksplisit

1.0 INTRODUCTION

Islam outlines three main criteria that need to be considered in product offerings namely realistic, humanistic and transparent (Alserhan, 2011). In surah Al-Baqarah verse 172 Allah S.W.T says

۱۷۲ تَعْبُدُونَ إِيَّاهُ كُنتُمْ إِنْ لِلَّهِ وَالشُّكْرُ مَا رَزَقْنَاكُمْ مَا طَيَّبْتُمْ مِنْ كُلِّوَا أَمَّنُوا الَّذِينَ يُهَا يَا

O you who have believed, eat from the good [i.e., lawful] things which We have provided for you and be grateful to Allah if it is [indeed] Him that you worship.

In a Hadith narrated by Al-Tirmizi and Ibn Majah, Rasulullah S.A.W said:

الْحَلَالُ مَا أَحَلَّ اللَّهُ فِي كِتَابِهِ وَالْحَرَامُ مَا حَرَّمَ اللَّهُ فِي كِتَابِهِ وَمَا سَكَتَ عَنْهُ فَهُوَ مِمَّا عَفَا لَكُمْ

What is halal is something that Allah SWT has made lawful in His Book and what is haram is something that Allah SWT has forbidden in His Book. And whatever He keeps silent, then it includes what is forgiven for you.”

Here it can be seen, Islam attaches great importance to the production, sale, purchase, and use of Halal products. For products, especially cosmetics, where the largest market in Malaysia is the Muslim consumer market, it is necessary to provide Halal cosmetic products to meet the

needs of the Muslim community. In general, Halal cosmetic products have a great opportunity to grow in the Malaysian market where is influenced by the percentage of demand from customers due to economic factors and consumer lifestyles. Therefore, consumer awareness of Halal cosmetic products is important in further increasing the involvement of cosmetic product manufacturers to apply for Halal certification for their cosmetic products.

According to a new report by Grand View Research, 2020, the global skincare products market is rapidly expanding and is projected to continue for the next several years. The market is projected to reach USD 183.03 Billion by 2025 expanding at a CAGR of 4.4 (Media, 2020). Further data also shows that demand for Halal cosmetics increasing where the data obtained in 2014 shows that the demand for Halal cosmetic products is USD54 billion and this amount has increased to USD80 billion in 2020. Apart from countries such as Egypt, Pakistan, Jordan, and Singapore, Malaysia is also listed as the top country to successfully dominate the Halal cosmetics and pharmaceutical products market (Ariffin et al., 2016).

2.0 PROBLEM STATEMENT

Understanding and awareness of Halal cosmetic products are still lacking compared to Halal food products. A study on Halal food products for example found that the index of consumer concern on Halal issues is high at 88 percent which shows that consumers have a good understanding and awareness of Halal food products which is translated into their purchasing decisions (Nor Aini Haji Idris & Mohd Ali Mohd Noor, 2013). High awareness of Halal food is because food is directly attached to human life. Muslims understand that whatever they eat will become flesh and blood and affect the whole process of their behaviour and way of life. Miftah Farid and Hasan Basri, 2020 in their articles quote a statement by Al-Ghazali in his book *Bidayatul Hidayah* which warns Muslims about how dangerous it is if the stomach is filled with haram food. He mentioned:

"If satiety from halal food is the beginning of all bad, what if from the Haram? Looking for something Halal is an obligation for every Muslim. Praying and studying accompanied by consuming Haram food such as building on animal waste."

The above quote indicates that people who consume Haram food even though he is diligent in worshipping, his worship will not be accepted in the sight of Allah SWT, Al Ghazali calls it like building on waste. The knowledge he acquired might not be a benefit to him. Because Haram foods that enter a person's body will harden the mind and heart to receive knowledge or wisdom. So that instead of getting closer to his Rabb, he even more distant. This is in line with the hadith of the Prophet Muhammad S.A.W. as narrated by At-Thabrani:

"Know that if bribes are forbidden to enter the stomach of one of you, then the deeds will not be accepted for 40 days"

The halal cosmetic product still climbing to the growth level. Most Muslim customers nowadays are starting to realize the existence of Halal cosmetic products in the market. However, only small segments of them use or chose Halal cosmetics as their beauty products. Based on a study conducted on the usage of cosmetics among young Muslim women found that Muslim women aware of the availability of Halal cosmetics however, they still consumed non-Halal certified cosmetics. This non-Halal-certified brand usually an international brand and well known in the market. (Abdul Hafaz Ngah, Serge Gabarre,

Heesup Han, Samar Rahi, Jasim Ahmad Al-Gasawneh, Su Hyun Park, 2021). The reason why this happened needs further research. Why the decision to purchase still goes for non-Halal certified cosmetics? Is this because of lack of knowledge or there is something with their attitude?

The other issue is the dumping of cosmetics in the market where encourages customers to be smarter in deciding on purchasing. According to information released by the Ministry of Health, many cosmetics in the market are detected to contain scheduled poisons such as azelaic acid, hydroquinone, and tretinoin (Shahimi, 2017). This led the customer to become more cautious in buying cosmetics. Therefore, as a customer, they must be careful in looking for cosmetics and this issue provide an opportunity for Halal cosmetic product. Due to this issue and problem, there is a need to identify factors that contribute to the purchase decision of Halal cosmetics. Since this problem falls under the customer cognitive and emotion view model, there is a probability that knowledge factors and attitude of customers influenced their purchasing behaviour.

According to Fishbein and Ajzen (1975), knowledge is also known as the cognitive factor where knowledge is the foundation that builds the building blocks in the structure of human thought. It also serves as the core to determine the attitude, intention, and behavior of an individual. Exposure to new information can increase knowledge and indirectly it will result in changes in behavior (Mahmud & Siarap, 2013).

Attitude on the other hand can indirectly affect an individual's choice of something. Attitude can also be defined as an individual's assessment on the effects of the implementation of a behavior. According to Fishbein and Ajzen (1975), human attitude can be described as a form of the tendency for humans to act consistently towards an object or situation. Such tendency refers to the state of a person reacting to a message or knowledge acquired. Therefore, to identify customers' decision to purchase Halal cosmetics products, the instruments of these two constructs is being tested.

3.0 METHODOLOGY

The sample for this study is 100 Muslim women customers in Selangor. As for the determination of the sample size, the research team referred to the recommendation of Roscoe (1975) where according to him, a sample size larger than 30 and less than 500 respondents is sufficient to conduct a study. Given that the sample size used for this study was 100 Muslim women, the researcher concluded that this sample size was robust to achieve the objectives of the study.

Figure 1: Research Framework for the Formation of Knowledge and Attitudes Research Instrument towards Purchasing Decisions

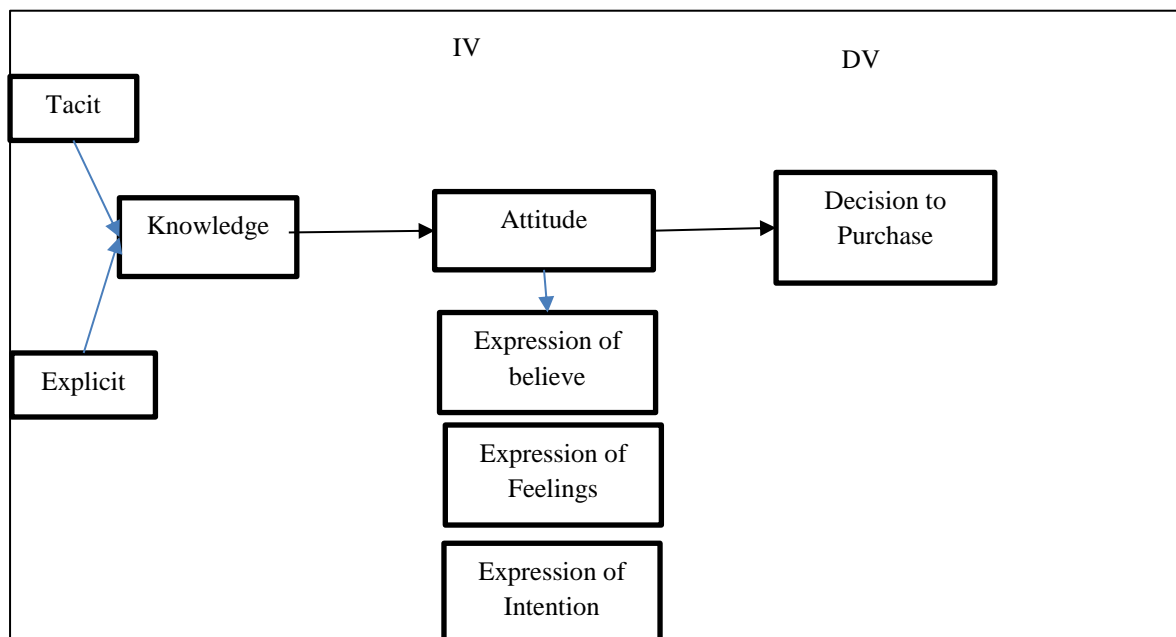


Figure 1 illustrates the framework of the study which shows the formation of knowledge and attitude instruments. The selection of this instrument is based on the observation of the previous study in Halal. The model specification and also the method of data analysis that uses the validity and reliability of the variables by looking at the relationship and a high level of confidence in the independent variables to the dependent variables. Each instrument was tested using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The test also measures sampling adequacy by tested with Kaiser-Meyer-Olkin (KMO), Cronbach's alpha, and Bartlett's Test of Sphericity (BTOS) which used to test the correlation value of the identity matrix with significant value (Sig. = 0.000) which is an indication of the correlation test of the existence of a relationship between all instruments studied. This test should be significant at a significance level of at least 5 percent to see the relationship between each instrument. Thus, it ensures that all the instruments studied are suitable for analysis. If this test is less than 0.3 or all correlation values are equal then factor analysis is not appropriate to use and it can be disputed (Hair et al. 2020). Next, once the values of validity and reliability are accepted then it can be applied to multiple regression analysis. For forecasting between each instrument, the value of the coefficient obtained with a significant value is between 1.96 and 1.65, respectively (Hair et al.2020). The coefficients obtained are used as an indication that there is a relationship between the following factors with the decision to purchase.

4.0 FINDINGS AND DISCUSSIONS

4.1 Analysis of Respondent

The study covers Muslim women in Selangor who purchase Halal cosmetics products. The distribution of respondents for data analysis is 100 respondents. The demographic profile of the sample analyzed descriptively showed that 100 samples were consisting of the majority of

ages were 26 to 33 years (29.9%), 42 to 49 years (23.4%), 34 to 41 years (22.9%), 18 to 25 years (12.9%) and the remaining 50 years and above (10.9%). The next demographic data is on the marital status of the respondents involved in this study. A total of 69.7% were married and the remaining 30.3% were single. The data reported that 42.8% of respondents bought Halal cosmetic products 1 to 2 times a year, 32.3% of respondents stated that they buy Halal cosmetic products 3 to 4 times a year and the remaining 24.9% of respondents stated that they buy Halal cosmetic products 5 times and above for a period of one year. All respondents are working and earn a net monthly income in the range of RM1000 to RM5000.

4.2 Validity and Reliability Analysis

The reliability and validity positions for each item in this study are reported in Table 1, Table 2, and Table 3 as follows. There are 2 instruments from the knowledge construct, namely tacit and explicit knowledge, and 3 instruments for the attitude construct, namely the expression of belief, expression of feelings, and expression of intention, which have gone through the analysis of reliability and validity. Only 4 instruments achieved Cronbach alpha values above 0.7 while one instrument (expression of intention) achieved Cronbach alpha values 0.44. Hence this instrument has been dropped. The average number of each item analyzed ranged from five to eight for each instrument.

Table 1: Instrument Reliability Analysis (N = 100)

Constructs	Instruments	No. Items	Cronbach Alpha Value (α)	Drop Item
Knowledge	Tacit	6	0.70	-
	Explicit	8	0.81	-
Attitude	Expression of Belief	6	0.77	-
	Expression of Feelings	5	0.89	-
	Expression of Intention	5	0.44	5

source: Field study 2020

Next is the instrument validity analysis in Table 2 involving the Kaiser-Meyer-Olkin (KMO) analysis. The highest KMO value record is 0.806 which is the instrument of expression of feelings. While the value of communality for this instrument recorded 0.705 and the variance described is 70.561. This illustrates that the situation of the instrument is satisfactory and there is a positive relationship between each number of items that is 5 numbers. This shows that each instrument of expression of feelings has good items and supports the validity of the instrument.

Overall, each instrument studied through validity analysis has reached a value of 0.7 and above. This validity is in line with the recommendations of Hair et al. (1998) and Nunnally (1978) who stated that the level of coefficient and KMO value is satisfactory and there is no multicollinearity problem in this study. Therefore, the instrument is good and can be applied for further analysis.

Table 2: Instrument Validity Analysis (N=100)

Instruments	No. Items	KMO	Communalities	Variance Explained (%)
Tacit	6	0.707	0.633	63.355
Explicit	8	0.733	0.628	62.830
Expression of Belief	6	0.748	0.712	71.191
Expression of Feelings	5	0.806	0.705	70.561

source: Field study 2020

The results of the analysis from Table 3 are the mean position and standard deviation for each instrument tested. The findings illustrate that the average respondent was strongly in agreement with each question item for the instrument. The highest mean value is 9.21 which strongly agrees with the statement of expression of feelings. On average, the other three instruments' mean scores are above 7 and this shows that all respondents strongly agree with the statement of items for each instrument. The standard deviation position also reflects a positive value. In this test, all instruments recorded the highest standard deviation value which exceeds 0.5.

Table 3: The Average Position and Standard Deviation of Each Instrument

Instruments	Mean	Standard Deviation
Tacit	7.77	2.012
Explicit	8.45	2.017
Expression of Belief	8.96	1.573
Expression of Feelings	9.21	1.460

source: Field study 2020

4.3 Implication of the Study

Knowledge and attitude are the main factors used to influence the customer purchase decision. Desire to purchase will exist if the customer has good knowledge of the product. Everyone does not have the same knowledge. This depends on their efforts in gaining knowledge on something attractive to them. Therefore, according to Polanyi, 1996, knowledge can be categories into two which are tacit and explicit. Tacit knowledge is the knowledge that is in the human mind, can be expressed through the implementation of skills that are conveyed in the form of learning by doing and learning by watching (Wahyuni, 2018). Tacit knowledge also may refer to the experience of customers or people around them in using Halal cosmetics. In marketing word of mouth becomes the effective medium of dissemination of information. Knowledge of the guidelines given by religion also may shaped customers' behaviour on certain activity including their purchasing patent and behaviour. As a Muslim, this kind of knowledge has a high influence on their decision in purchasing. The other category of knowledge is explicit knowledge. According to Choi and Lee, 2003, explicit knowledge is one type of knowledge that is easily documented and formed. Customers gain knowledge on Halal cosmetic products through reading either from print media or mass media. Nowadays information on the products also easy to access online. Most Halal cosmetic manufacturer advertises their products online. Therefore, it is easy for customers to obtained knowledge on the products.

Attitude also play important roles in customers decision to purchase. There are two categories of attitude which are an expression of belief and expression of feelings. Customers will purchase the product if they believe that the products may provide good results to them. Expression to believe comes with trust and respect. Customer will acknowledge that products

are Halal if there are certain elements appear such as Halal certification from JAKIM or JAKIM recognize Halal certification body. Expression of feelings on the other hand more on customers' emotion and rational behaviour on the product. Sometimes customers buy the product, not because of the pricing and advertisement but they buy because of rational and emotional motives like satisfaction, self-rewarding, enhance self-confidence, status, lifestyle, and quality of life.

The results of the study found that each instrument extracted from the knowledge that is tacit knowledge and explicit knowledge, as well as attitude instruments that are an expression of belief and expression of feelings, are significant to be used as analytical items for knowledge and attitude instruments that influence customer purchase decisions on Halal cosmetics. Instruments with high-reliability values (0.89) refer to instruments of expression of feelings, followed by explicit knowledge (0.81), expression of belief (0.77), and tacit knowledge (0.70). The overall average of the instruments in the reliability analysis has a significant relationship with the customer decision to purchase which is 0.7 and above. While the validity analysis that looked at the highest KMO value was the knowledge instrument (0.86), followed by the expression of belief instrument (0.748), explicit (0.733), and then the tacit instrument (0.707). In the overall context, knowledge and attitude are factors that influence a customer's purchasing decision.

5.0 CONCLUSION

This study focuses on the validity and reliability of instruments constructed from elements of knowledge and attitude. Tacit knowledge and explicit knowledge can motivate and influence customers in the purchase decision of Halal cosmetic products. The translation of attitudes through the expression of beliefs and feelings is also able to motivate purchasing decisions. Through validity and reliability test of the data among Muslim women, the study found that customer knowledge and attitude are important and need to be given attention in developing marketing strategies for Halal cosmetic products. Furthermore, this study is also in line with the development of Halal cosmetics in Malaysia which nowadays is demanded by customers who care about health, Halal, and product purity.

6.0 ACKNOWLEDGEMENT

This study uses funds from the Kolej Universiti Islam Antarabangsa Selangor (KUIS) Research and Innovation Grant (KUIS/2019/GPIK-18/GPI/16).

REFERENCES

- Al Quran
Al Hadith
Abdul Hafaz Ngah, Serge Gabarre, Heesup Han, Samar Rahi, Jasim Ahmad Al-Gasawneh, Su Hyun Park. (2021). Intention to Purchase Halal Cosmetics: Do Males and Females Differ? A Multigroup Analysis. *MDPI Journal Cosmetics*, 8(1), 19. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/cosmetics8010019>
Alserhan, B. (2011). Principles of Islamic Marketing. New York: Roulledge.
Arifin, A., Noor, M. A. M., & Wahid, H. (2016). Faktor-faktor yang Mempengaruhi Permintaan Produk Kosmetik Halal, Prosiding Seminar Kebangsaan Tamadun & Warisan Islam (TAWIS) 2016, Ms. 18-32.

- Choi, B., & Lee, H. (2002). Knowledge management strategy and its link to knowledge creation process. *Expert Systems with Applications*, 23(3), 173–187.
- Hair, J.F., Jr, Black, W.C., Jr, Babin, B.J., Anderson, R.E. and Tatham, R.L. (2010), *Multivariate Data Analysis*, 7th ed., Prentice Hall, Upper Saddle River, NJ.
- Idris, N. A. (2004). *Laporan IRPA: Cabaran Industri Pemprosesan Makanan Halal Bersaiz Kecil dan Sederhana Menghadapi AFTA*. Jabatan Ekonomi Pembangunan, Fakulti Ekonomi, Universiti Kebangsaan Malaysia.
- Mahmud, M. H., & Siarap, K. H. (2013). Kempen Pencegahan H1N1: Kajian Tentang Pengetahuan, Sikap Dan Amalan Penduduk Di Timur Laut Pulau Pinang. *Jurnal Komunikasi*, 29(1), 127-140.
- Media, F. N. (07 May, 2020). *Escalating Demand in Cosmetic Skincare Products Boosting Growth in Multi-billion Dollar Industry*. Retrieved from CISION News Wire: <https://www.prnewswire.com/news-releases/>
- Miftah Farid & Hasan Basri. (2020). The Effects of Haram Food on Human Emotional and Spiritual Intelligence Levels. *Indonesian Journal of Halal Research* 2(1), 21-26.
- Nunnally, J.C. (1978) *Psychometric theory*. 2nd Edition, McGraw-Hill, New York.
- Roscoe, J.T. (1975). *Fundamental research statistics for the behavioural sciences*. 2nd edition. New York: Holt Rinehart & Winston.
- Shahimi, M.A (07 November, 2020). Bahana produk kosmetik 'timbang kilo'. Retrieved from Berita Harian Online: <https://www.bharian.com.my/>.
- Wahyuni, A. E. (2018). Pengaruh Tacit Dan Explicit Knowledge Untuk Meningkatkan Kinerja Ikm. *Jurnal Ilmiah Teknologi Informasi Terapan*, 45-50.