Determinants of Consumer Behavior Towards Purchase Intention of Halal Cosmetic Product Using Structural Equation Modelling Approach

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Abstract: This study aims to determine consumer characteristics in purchasing intention for halal cosmetic products and to analyse the influence of religiosity, halal awareness and Theory of Planned Behavior (TPB). The type of research used is quantitative research, collecting data by distributing questionnaires to 242 Muslm consumers of halal cosmetic products in Jabodetabek. Data collection is using Google Form through social media and instant messengers. Research finding there are correlation between religiosity, halal awareness, attitude, subjective norm, and perceived behavioral control toward purchase intention. Managerial implications can be applied by cosmetic companies to increase consumer buying interest in halal cosmetic products. In future studies, researchers can apply other theories to study purchase intention, such as the theory of consumption value or the theory of innovation diffusion.

1 INTRODUCTION

In today's global economy, halal lifestyle has become increasingly popular. Halal means as allowed or permissible and refers to halal based on individual believer. Besides, this concept does not apply merely to food and beverages, and it is also applied in medicines, cosmetics, personal care, and finance. Muslims are obligated to consume halal products obtained from halal ways wherever they lived. This lifestyle influenced by standards, values, and principles of each people, this affects consumers' lifestyles, which in turn affect consumer decision-making behavior.

According to World Population Review (2021), the world Muslim population is growing, from 1.9 billion in 2021 and projected to be 3 billion devotees or around 31.1% of the world's population in 2050. This number is the biggest increment, which is up to 6.8%. This fact shows that Indonesia is the largest Muslim country in the world with a Muslim population of 237 million people.

Indonesia is home to the world's largest domestic halal economy market, driven by the largest global Muslim population. This population's domestic spending across halal economy products and services stood at USD 184 billion in 2020 and is projected to increased by 14.96% to reach USD 281.6 billion in 2025. In 2020, Indonesia has succeeded in representing the largest halal consumer market in the world with a contribution of 11.34% to the world's halal consumer market. (Source: Sharia Economy and Finance Report 2020, Bank Indonesia).

In the midst of the COVID-19 pandemic, which has weakening various sectors, such as restaurants, retail, and tourism. However, cosmetics sector has strengthened. According to Allied Market Research, throughout 2020, GMV of global cosmetics reached USD 145.3 billion and is expected to continue to grow with a compound annual growth rate (CAGR) of 3.6% per year, projected to reach USD 185.5 billion in 2027. The growth of the cosmetic industry also occurred in Indonesia. According to Salam Gateway, from 2018 to 2021, the cosmetic industry in Indonesia has also seen positive growth with average growth of 8% p.a.

According to the State of Global Islamic Report 2020. Globally, Muslim cosmetics consumption is estimated to reach a value of USD 76 billion in 2024 with an average annual growth rate of 4.2%. Currently, Muslim consumption in Indonesia is the second largest after India.

Based on above data, all stakeholders are competing to be able to invest and increase their

market share in the halal sector of cosmetics. Investments in the cosmetics sector are expected to reach USD 3.4 trillion or 15% of world GDP. Indonesia is one of two countries whose get investment in the cosmetics industry. Indonesia's online beauty products marketplace, Sociolla, raised USD 98 million through its series D and E funding rounds led by Singaporean funds. This value is the largest investment in cosmetics industry.

Indonesia is a country that is quite consistent with great potential to develop halal cosmetic products. The huge market potential of halal cosmetic products is being exploited by local and multinational cosmetic manufacturers targeting Muslim consumers with a strategy of making halal cosmetic products. This is consistent with the statement that businesses that adhere to Islamic law can attract customers.

Theory of Planned Behavior has been used in many studies that focused on individuals' behavioral intention. Including studies that focus exclusively on the intention of Muslim consumers in terms of buying both products and services. By referring to the outcomes that were generated for these research, it was observed that intention is an outcome of the influence of various types of factors.

Lada et et al. (2009) conducted research by predicting Theory of Reasoned Action (TRA) factors, including attitudes and subjective norms that influence purchase intention of halal food product in Malaysia. The result show that attitude and subjective norms are significantly influence purchase intention.

Theory of Planned Behavior (TPB) is a development of TRA which has succeeded in identifying factors that predict and change behavior (Ajzen, 1985). These factors are measured by on attitude, subjective norms, and perceived behavioral control.

Aisyah (2017) research that TPB influences consumers' purchase intention for halal cosmetics. As a result, attitudes, subjective norms and perceived behavioral control have a direct influence on purchase intention. Vanany et al (2019) also confirm that TPB factor has a positive effect on purchase intention halal food products.

Haque (2018) conducted research in Malaysia, by adding the religiosity variable to the Theory of Planned Behavior model by assuming that this variable influence purchase intention. Khan et al (2022) also conducted research by adding several variables, one of which was religiosity and focusing on Generation Y in Malaysia. The results is religiosity influences purchase intention. Mukhtar and Butt (2012) states as well that there are differences in the level of religiosity which will vary for every Muslim.

Shahid et al. (2019) found that globally, there is an increment in Muslim halal awareness. Researchers conducted research in India by adding halal awareness to Muslim consumers regarding halal cosmetics. As a result, halal awareness influence purchase intention.

Kurniawati and Savitri (2020) show that the level of halal awareness among Indonesian Generation Z consumers is very high, with an index of 94.91. This study also shows that religiosity is the factor that most influences halal awareness in Indonesia with an index of 96.91.

Wilson and Liu (2011) stated "Halal, Islam and Muslims will always cause brand academics and practitioners problems", which highlights the important of studying the buying patterns of these consumers. In this paper, aim to modify previous research model and investigate the factors that influence the purchase intention of halal cosmetic product among Muslim consumers in Jabodetabek.

2 METHOD

2.1 Research Framework

Based on the previous studies results and based on the description of each variable, in context of this study, the Theory of Planned Behavior variables such as Attitude Toward Behavior (ATP), Subjective Norm (SN), and Perceived Behavioral Control (PBC), and additional variables Religiosity (R) and Halal Awareness (HA). The theoretical framework is presented in Fig. 1.
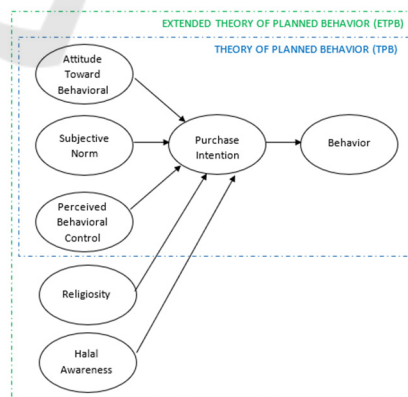

Figure 1: Theoretical Framework

Based on the review of existing literature, research objectives and the model (Fig. 1), following hypotheses were developed:

H1. Attitude Towards Behavioral (ATP) will positively influence Purchase Intention (PI) of halal cosmetics.

H2. Subjective Norm (SN) will positively influence PI of halal cosmetics.

H3. Perceived Behavioral Control (PBC) will positively influence PI of halal cosmetics.

H4. Religiosity (R) will positively influence PI of halal cosmetics.

H5. Halal Awareness (HA) will positively influence PI of halal cosmetics.

The object determined in this study is Muslim consumers from Jabodetabek with the following criteria: All Men and Women between the ages of 17-55 years who have used or currently use halal cosmetic products. This study obtained a total of 242 respondents through a questionnaire with data collection methods. The type of data in is quantitative data, analysed using descriptive and verification methods. In this study, the data were analysed using the Structural Equation Modelling (SEM) method using the IBM SPSS AMOS 26 software.

The questionnaire of this study was developed by adopting and modifying items from previous studies to certain extent in order to suit the needs of the current study. Table 1 depicts the sources the questionnaire items. The questionnaire used a 5-point Likert-scale. The scale ranged from strongly disagree to strongly agree whereby, 1 represented strongly disagree, 2 indicated disagree, 3 indicated neural, 4 denoted agree and lastly 5 expressed strongly agree.

Table 1: Questionnaraire Items

No	Factor	Source
1	TPB Factor (Attitude, Subjective Norm, Perceived Behavioral Control)	Aisyah, 2017; Vanany et al., 2019; Wirakurnia et al., 2021.
2	Halal Awareness	Shahid et al., 2018; Kurniawati dan Savitri, 2020.
3	Religiosity	Kurniawati dan Savitri, 2020; Awalia et al., 2021; Khan et al, 2020

3 RESULT AND DISCUSSIONS

3.1 Characteristics of Respondents

The characteristics of the respondents in this study can be seen in the following table:

Table 2: Respondent Characteristics

No	Parameter	Frequency	Percentage
1.	**Gender**		
	- Male	104	42.98%
	- Female	138	57.02%
2.	**Age**		
	- 18-25 years	79	32.64%
	- 26-35 years	83	34.30%
	- 36-45 years	45	18.60%
	- 46-55 years	35	14.46%
3.	**Last Education**		
	- Diploma	7	2.89%
	- Bachelor	155	64.05%
	- Master	26	10.74%
	- High School	54	22.31%
4.	**Occupation**		
	- Teacher/Lecture	16	6.61%
	- Housewife	21	8.68%
	- Employee	125	51.65%
	- Student	61	25.21%
	- Entrepreneur	19	7.85%
5.	**Average Income**		
	- < Rp 5.000.000	127	52.48%
	- Rp 5.000.000 – Rp 15.000.000	26	10.74%
	- > Rp 15.000.000	89	36.78%

Source: Primary Processed Data (2022)

3.2 Assessment of Measurement Model

The researchers proceeded with verifying the Measurement Model using Confirmatory Factor Analysis (CFA) by employing IBM SPSS AMOS. Before conducting SEM the overall measurement model should be assessed, separately through validity and reliability.

The result of measurement model of validity test shows that there are 19 indicators observed in exogenous latent variables that have passed the validity test, as all loading factors are > 0.5, as well critical ratio > 2.58.

The result of measurement model of validity test shows that there are 6 variables observed that have passed the reliability test, as all construct reliability > 0.7 and variance extracted > 0.5.

3.3 Assessment of Structural Model

From several step of SEM, there are several structural model evaluation criteria as follows:

1. Data Normality

In the AMOS output, evaluation of data normality is carried out using a critical skewness ratio value of ± 2.58 at a significance level of 0.01 (1%). The outcomes of normality test are depicted in AMOS output that all indicators have a critical ratio value below ± 2.58. Data from indicators are normally distributed.

2. Data Outliers

Evaluation of data outliers can be seen from the Mahalonobis Distance in the AMOS output, if Mahalonobis d-squared value is greater than Chi-Square value with a degree of freedom (df) of the number of variables at a significance level of 0.05 then the data indicates an outlier. The largest Mahalonobis d-squared value is 82.22 which is smaller than Chi-square value of 118.75. Thus, it can be conducted that the data are free from outliers.

3. Goodness of Fit (GOF) Model

Under this stage, all the variables were connected to each other in order to assess the overall fit of the model through assessment of GOF. The results of the measurement model in Fig 2 and Table 3 using the Maximum Likelihood estimation method.
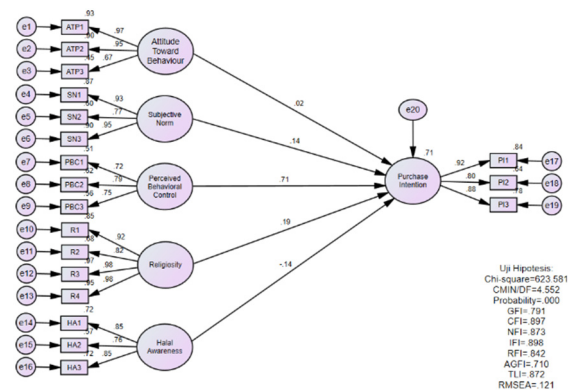
Table 3: Goodness of Fit

GOF Index	Cut-off Value	Output	Result
Probability	p > 0.05	0.000	Not Fit
RMSEA	RMSEA ≤ 0.08	0.121	Not Fit
RMR	RMR < 0.05	0.085	Not Fit
GFI	GFI ≥ 0.9	0.791	Not Fit
AGFI	AGFI ≥ 0.8	0.710	Not Fit
CMIN/DF	CMIN/DF ≤ 2	4.552	Not Fit
TLI	TLI ≥ 0.95	0.872	Not Fit
CFI	CFI ≥ 0.95	0.897	Not Fit
IFI	IFI ≥ 0.90	0.898	Not Fit

It can be seen that the indexes are not fit. SEM model is a carried out in stages. If a fit model has not been obtained, then the model originally needs to be revised. First and foremost, in order to address the issue, the researchers have deleted a number of items that loaded with lower values as well as connecting items with high covariance based on the modification indices as suggested by Zainudin (2012). This process was repeated until an adequately fitting model was achieved that meet all the requirements for each fit index by connecting several items. The results of these modification are presented in Fig 3 and Table 4 as follows.
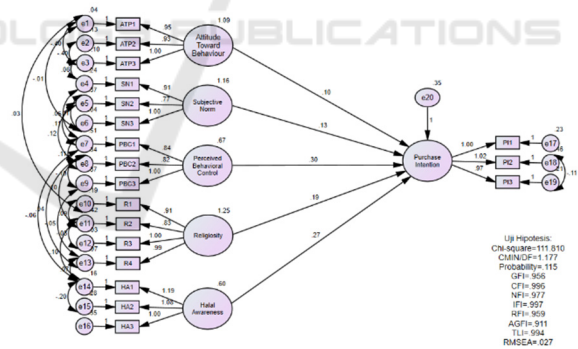

Figure 3: Variable Measurement Model After Modification

Figure 2: Variable Measurement Model

Table 4: Goodness of Fit After Modification

GOF Index	Cut-off Value	Output	Result
Probability	p > 0.05	0.115	Fit
RMSEA	RMSEA ≤ 0.08	0.027	Fit
RMR	RMR < 0.05	0.044	Fit
GFI	GFI ≥ 0.9	0.956	Fit
AGFI	AGFI ≥ 0.8	0.911	Fit
CMIN/DF	CMIN/DF ≤ 2	1.177	Fit
TLI	TLI ≥ 0.95	0.994	Fit
CFI	CFI ≥ 0.95	0.996	Fit
IFI	IFI ≥ 0.90	0.997	Fit

3.4 Hypothesis Testing

SEM was used by the researchers to validate the proposed conceptual framework that has been developed for the current study. The hypotheses were evaluated according to the statistical output attained for the model. In total the study put forth a total 5 hypotheses in regard to prior findings from the literature. The outcomes of the hypothesis testing are depicte in Table 5 provided below which indicates the values for estimates, critical ratios and significance level are shown. By looking at the table, it can be seen that all hypotheses were supported as they had p-values less than 0.05.

Table 5: Result of Hypotheses Testing

Hypothesis; Relationship	Estimate; P Value	Result
H1; PI <- ATP	0.100; 0.041	Significant
H2; PI <- SN	0.133; 0.028	Significant
H3; PI <- PBC	0.302; 0.037	Significant
H4; PI <- R	0.193; 0.001	Significant
H5; PI <- HA	0.273; 0.02	Significant

Hypothesis testing and structural equations in this study are as follows:

$$PI = 0.100\ ATP + 0.133\ SN + 0.302\ PBC \quad (1)$$
$$+ 0.193\ R + 0.273\ HA + e$$

3.5 Coefficient of Determination (R²)

Evaluation of the structural model is carried out by looking at the Coefficient of Determination. The coefficient of determination aims to measure how far the model's ability to explain the variance of the dependent variable. The value of the coefficient of determination is between 0 and 1. For this research, structural relationship based on the estimate value can see in Table 6:

Table 6: Coefficient of Determination (R²)

Squared Multiple Correlations: (Group number 1 - Default model)			
			Estimate
Purchase_Intention			0.633

From Table 6, it can be explained that estimate value of Purchase Intention (PI) variable is 0.633. This shows that 63.3% of PI variable can be influenced by ATP, SN, PBC, R, and HA variables, while the remaining 36.7% is influenced by other variable outside current studies.

4 CONCLUSIONS

This study aimed to expand the TPB by introducing additional factors that predict the intention to purchase halal cosmetics. This study also addressed the call from previous literature regarding the lack of research in halal cosmetic in other countries. The results revealed evidence of significant relationships between attitude, subjective norm, perceived behavioral control, religiosity, and halal awareness with halal-cosmetic consumption among consumers in Jabodetabek.

As a muslim, they have to be extra careful in their choice of products, as they have to ensure that the product they use comply with syariah law by being halal. Therefore, this research highlights several valuable insights, as all the antecedents of PI studied directly influence the five hypotheses which had been proposed. Therefore, market researchers in general and international brands in particular should design their marketing campaigns focusing on creating awareness regarding their compliance with halal products using open and crisp communication.

The background of the consumers is a crucial factor that influences their responsiveness, and it has made customers more cognisant and responsive to halal products and ingredients. The external socio-demographic variables, such as the education level and occupation have an influence towards purchase intention. Consumers with a high level of religiosity, and who are well educated, are particularly concerned

about the halal label being used to identify halal cosmetics products.

Indonesia has taken a serious approach towards developing Halal products because it has been regulated in Law (UU) No. 33 2014 regarding Halal Product Guarantee.

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