







# “Muslim Generation Z’s purchase intention of halal cosmetic products in Indonesia”

<b>AUTHORS</b>	Heri Sudarsono  Retty Ikawati  Siti Nur Azizah  Rusny Istiqomah Sujono  Yeny Fitriyani 
<b>ARTICLE INFO</b>	Heri Sudarsono, Retty Ikawati, Siti Nur Azizah, Rusny Istiqomah Sujono and Yeny Fitriyani (2024). Muslim Generation Z’s purchase intention of halal cosmetic products in Indonesia. <i>Innovative Marketing</i> , 20(4), 13-24. doi: <a href="https://doi.org/10.21511/im.20(4).2024.02">10.21511/im.20(4).2024.02</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/im.20(4).2024.02">http://dx.doi.org/10.21511/im.20(4).2024.02</a>
<b>RELEASED ON</b>	Friday, 04 October 2024
<b>RECEIVED ON</b>	Wednesday, 14 February 2024
<b>ACCEPTED ON</b>	Friday, 20 September 2024
<b>LICENSE</b>	 This work is licensed under a <a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License</a>
<b>JOURNAL</b>	"Innovative Marketing "
<b>ISSN PRINT</b>	1814-2427
<b>ISSN ONLINE</b>	1816-6326
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

51



NUMBER OF FIGURES

1



NUMBER OF TABLES

4

© The author(s) 2024. This publication is an open access article.



**BUSINESS PERSPECTIVES**



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10,  
Sumy, 40022, Ukraine  
[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 14<sup>th</sup> of February, 2024  
**Accepted on:** 20<sup>th</sup> of September, 2024  
**Published on:** 4<sup>th</sup> of October, 2024

© Heri Sudarsono, Retty Ikawati, Siti Nur Azizah, Rusny Istiqomah Sujono, Yeny Fitriyani, 2024

Heri Sudarsono, Associate Profesor, Faculty of Business and Economics, Department of Economics, Universitas Islam Indonesia [Islamic University of Indonesia], Indonesia.

Retty Ikawati, Dr., Assistant Professor, Faculty of Economics and Business, Department of Food Service Industry, Universitas Ahmad Dahlan [Ahmad Dahlan University], Indonesia.

Siti Nur Azizah, Dr., Assistant Professor, Faculty of Islamic Economics and Business, Universitas Islam Negeri Sunan Kalijaga [Sunan Kalijaga State Islamic University], Indonesia.

Rusny Istiqomah Sujono, Assistant Professor, Faculty of Economics and Business, Universitas Alma Ata [Alma Ata University], Indonesia.

Yeny Fitriyani, Assistant Professor, Department of Shariah Economics, STAI Syubbanul Wathon [Syubbanul Wathon Islamic College], Indonesia.



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Conflict of interest statement:**  
Author(s) reported no conflict of interest

Heri Sudarsono (Indonesia), Retty Ikawati (Indonesia), Siti Nur Azizah (Indonesia), Rusny Istiqomah Sujono (Indonesia), Yeny Fitriyani (Indonesia)

# MUSLIM GENERATION Z'S PURCHASE INTENTION OF HALAL COSMETIC PRODUCTS IN INDONESIA

## Abstract

This study aims to analyze the factors influencing the purchase intentions of male and female Muslim Gen Z in Indonesia toward halal cosmetics. A total of 434 female and 302 male respondents participated in the survey, and the data were analyzed using the Structural Equation Modeling Partial Least Squares (SEM-PLS) technique. The results indicated that religiosity significantly influenced attitudes and subjective norms of female respondents ( $\beta = 0.170, p = 0.000; \beta = 0.184, p = 0.000$ ), and affected attitudes, subjective norms, and perceived behavioral control of males ( $\beta = 0.119, p = 0.014; \beta = 0.105, p = 0.092; \beta = 0.181, p = 0.002$ ). Halal knowledge significantly affected attitudes, subjective norms, perceived behavioral control, and purchase intentions of females ( $\beta = 0.149, p = 0.004; \beta = 0.272, p = 0.000; \beta = 0.361, p = 0.000; \beta = 0.185, p = 0.001$ ), whereas it affected attitudes, subjective norms, and perceived behavioral control of males ( $\beta = 0.202, p = 0.009; \beta = 0.370, p = 0.000; \beta = 0.367, p = 0.000$ ). Halal certification also significantly influenced attitudes, subjective norms, and perceived behavioral control of females ( $\beta = 0.200, p = 0.000; \beta = 0.310, p = 0.000; \beta = 0.169, p = 0.009$ ) and males ( $\beta = 0.124, p = 0.043; \beta = 0.305, p = 0.000; \beta = 0.189, p = 0.006$ ). In conclusion, attitudes, subjective norms, and perceived behavioral control are key determinants of the purchase intentions of both male and female Gen Z individuals regarding halal cosmetics.

## Keywords

Generation Z, religiosity, halal knowledge, halal certificate, halal cosmetics

## JEL Classification

D12, M21, M31, Z12

## INTRODUCTION

As the world's largest Muslim-majority country, Indonesia holds a significant position in the global halal cosmetic industry. With a Muslim population exceeding 236 million (Biro Pusat Statistik, 2021), the nation represents an expansive market for halal-certified products. A notable segment of this market is the younger generation, particularly Gen Z, which comprises over 46 million individuals aged 15-24. This demographic is substantial and plays a pivotal role in shaping future consumer trends, especially in industries that align with Islamic principles.

As the halal cosmetic industry evolves, the intersection of religious values and modern consumer behavior presents a critical scientific inquiry. The growing demand for halal-certified cosmetics reflects a broader trend wherein consumers seek products that meet religious criteria and conform to the global standards of safety, cleanliness, and quality. In this context, the significance of halal certification becomes paramount, serving as both a marker of religious compliance and an assurance of product integrity.

This study is set within the broader landscape of consumer behavior influenced by religiosity, particularly how Islamic values shape purchasing decisions. In the case of Indonesia's Gen Z, religiosity appears to play a vital role in guiding their preferences for halal cosmetics, underscoring the need to explore the psychological and behavioral factors at play in this rapidly expanding market.

## 1. LITERATURE REVIEW

The Theory of Planned Behavior (TPB) model was developed from the reasoned action model (Ajzen, 1991). The TPB was also formulated based on attitude, subjective norms, and perceived behavioral control, culminating in the formation of an individual's intention (Bashir, 2019; Holdsworth et al., 2019). According to Bashir et al. (2018), attitude is an important predictor of behavioral intention. By contrast, Holdsworth et al. (2019) stated that subjective norm is associated with the opinions of relatives, co-workers, close friends, and business partners. Perceived behavioral control is an individual's perception of the means and opportunities to perform a particular behavior (Ajzen et al., 2005). Several studies have used TPB as a model to predict consumer intentions and behaviors in various fields (Bashir et al., 2018; Holdsworth et al., 2019). Similarly, some studies have modified TPB by including religiosity, halal knowledge, and halal certificate as constructs of the intention to purchase halal-related products (Ishak et al., 2019; Khan et al., 2020; Islam, 2020; Widyanto & Sitohang, 2020). Several preliminary studies have examined the influence of religiosity, halal knowledge, and halal certificate on attitude, subjective norms, and perceived behavioral control (Rahman et al., 2015; Ishak et al., 2019; Afmalia et al., 2020; Sudarsono & Nugrohowati, 2020; Khan et al., 2020; Widyanto & Sitohang, 2021; Afi & Aji, 2021). Iranmanesh et al. (2020) and Ngah et al. (2021) reported a relationship between attitude, subjective norms, and perceived behavioral control in purchasing cosmetics.

Purchase intention (IN) is an approach for predicting consumer behavior by focusing on certain products and consumers' willingness to purchase (Alam & Suyuti, 2011; Hashim & Musa, 2013). Decisions to purchase a product comprise a series of individual intentions and willingness to act on the product (Garg & Joshi, 2018). Kraljevic and Filipovic (2017) state that millennial consumers have the most significant amount and are edu-

cated as potential markets. Several studies have examined teenagers' intentions to purchase cosmetics because they have higher user intentions than adults (Briliana & Mursito, 2017; Herlina et al., 2020; Islam & Chandrasekaran, 2020; Khan et al., 2020; Widyanto & Sitohang, 2020). Conversely, numerous studies have examined the effect of gender on intention to purchase halal cosmetics (Ishak et al., 2019; Ngah et al., 2021). This research was conducted assuming that females' intention to purchase cosmetics is higher than that of males. Environmental factors or subjective norms influence the purchasing percentage of females (Ngah et al., 2021). This is in addition to other factors, such as religiosity, halal knowledge, halal certificate, attitude, and perceived behavioral control (Briliana & Mursito, 2017; Ishak et al., 2019; Herlina et al., 2020; Islam & Chandrasekaran, 2020; Khan et al., 2020; Ngah et al., 2021).

Religiosity (RE) is the belief and commitment to following the principles set by God (Ambali & Bakar, 2013). Forghani et al. (2019) state that this is an important aspect that greatly influences consumers' decisions to purchase products. Rakrachakarn et al. (2015) revealed that religiosity affects the lifestyle aspects of selective consumer behavior. It is an important factor used to determine the intention of the younger generation to purchase halal cosmetics because they are more conservative in carrying out religious orders (Ali et al., 2020). Therefore, religiosity positively affects subjective norms, perceived behavioral control, and the intention of Muslim Gen Z to purchase halal cosmetics. Muslim millennials in religious societies, purchase intentions, and habits can independently affect their purchase (Amalia et al., 2020). Several studies have shown that religiosity has a positive effect on attitude (Abd Rahman et al., 2015; Ahmadova & Aliyev, 2021; Elshaer et al., 2021; Handriana et al., 2020; Suparno, 2020), subjective norms (Elshaer et al., 2021), perceived behavioral control (Elshaer et al., 2021) and the intention to purchase halal cosmetics (Briliana & Mursito, 2017; Elshaer et al., 2021; Haque et al.,

2018; Herlina et al., 2020; Iranmanesh et al., 2020; Islam & Chandrasekaran, 2020; Khan et al., 2020; Widyanto & Sitohang, 2020).

Halal knowledge (HK) is a theoretical and practical understanding of halal-certified products that significantly shapes consumer decision-making processes (Nora. Suki & Norb. Suki, 2018). Rahman et al. (2015) defined knowledge as experience that refers to facts, feelings, and awareness gained through learning. It also refers to the expertise and skills inherent in individuals through theoretical or practical understanding of the subject (Abd Rahman et al., 2015). The increase in the demand for halal products among consumers, particularly cosmetics, is determined by an increase in knowledge (Hashim & Musa, 2013; Sudarsono et al., 2024). Bashir et al. (2018) state that halal knowledge is critical for ensuring that consumers understand the concept and system of halal. Therefore, knowledge is considered one of the critical factors used to predict the attitude and intention of Muslim Gen Z individuals to purchase halal cosmetics. Previous research has found that halal knowledge positively affects consumers' attitudes and intentions to purchase cosmetics (Abd Rahman et al., 2015; Riswandi et al., 2022; Sudarsono et al., 2020; Widyanto & Sitohang, 2020). Halal knowledge is obtained and owned by Gen Z Muslims and is emphasized to encourage further the intention to consume halal products; this is due to a Muslim optimizing actions to be in accordance with Islamic principles.

A halal certificate (HC) or logo is a guarantee issued by the government that states the product content of the materials according to Islamic values. The Halal Inspection Agency (LPH) auditing for halal certificate in Indonesia is part of the Institute for the Research of Food, Drugs, and Cosmetics, the Indonesian Ulema Council (LPPOM MUI). Besides, the fatwa trial process is also carried out by MUI before BPJPH issues the certificate. Manufacturers and marketers use halal certificate to inform and convince consumers that their products are under Islamic law (Ambali & Bakar, 2013; Annabi & Ibadapo-Obe, 2017; Sudarsono et al., 2023). A certified halal product usually has a halal logo printed on it along with its ingredients before distribution (Aqdas & Amin, 2020; Bashir, 2019). Halal products with a ha-

lal certificate can build the brand image of these products. Halal-certified products confirm safety, cleanliness, quality, and environmental sustainability; therefore, their associated cosmetics are rational for Muslim Gen Z people to use daily (Aziz & Chok, 2013; Haque et al., 2018).

Subjective norm (SN) is an individual's perception of the social pressure to perform or avoid a behavior (Ajzen et al., 2005). Jin and Kang (2011) also report that it plays a critical role in an individual's purchase intention. Social groups that influence individual behavior are families, peers, colleagues, and professionals (Souiden & Rani, 2015). Ngah et al. (2021) stated that subjective norms influence females' intention to purchase halal cosmetics more than males do. Besides, several studies have found a positive influence of subjective norms on the intention to purchase halal cosmetics (Haque et al., 2018; Iranmanesh et al., 2020; Ngah et al., 2021). Therefore, subjective norm is an essential factor influencing the attitude and intention of Muslim Gen Z individuals to purchase cosmetics. Numerous preliminary studies have also shown that subjective norms positively affect attitude and intention when purchasing cosmetics in Indonesia (Briliana & Mursito, 2017; Widyanto & Sitohang, 2021).

Perceived behavioral control (PBC) reflects people's perceptions of how easy or difficult it is to perform a behavior (Ajzen, 2005). Individuals with high levels of control affect their intentions to perform the behavior. It reflects perceptions of access to the resources and opportunities needed to achieve the behavior, such as money, time, and self-confidence, which people focus on in performing the behavior (Ajzen, 1991; Ajzen & Fishbein, 1980). The relationship between perceived behavioral control and a person's intention indicates that behavior has a certain level of control over the individuals engaged in the process. Perceived behavioral control is not only a decisive factor influencing attitude and behavior change but is also associated with salient beliefs as an essential source for decision-making (Ajzen & Madden, 1986). Therefore, perceived behavioral control positively affects Muslim Gen Z's intention to purchase halal cosmetics. Haque et al. (2018), Iranmanesh et al. (2020), and Ngah et al. (2021) found a positive relationship between per-

ceived behavioral control and consumer intention to purchase halal cosmetics.

Attitude (AT) refers to an individual's feelings and perceptions that influence future behavior (Ajzen, 1991). It has a reasonably close relationship with individuals and can be used to predict future behavior. Mafabi et al. (2017). stated that an individual with a positive attitude towards a specific behavior creates positive intention. Attitude refers to the stage before an individual intends to purchase or forfeit a product formed from positive information. Therefore, the attitude of Muslim Gen Z members has a positive effect on their desire to know and own a product. Numerous preliminary studies have confirmed a positive relationship between attitude and intention (Bashir et al., 2018; Briliana & Mursito, 2017; Haque et al., 2018; Ngah et al., 2021; Sudarsono et al., 2020).

## 2. AIM AND HYPOTHESES

This study aims to analyze the factors influencing the intention of female and male Muslim Gen Z to purchase halal cosmetics in Indonesia (Figure 1). This study differs from previous studies by adding religiosity, halal knowledge, and halal certification as factors influencing the intention to purchase halal cosmetics directly or through subjective norm, attitude, and perceived behavioral control. The model is expected to effectively predict the influence on the intention of female and male Muslim Gen Z to purchase halal cosmetics.

Based on the literature review, hypotheses can be derived to assess the validity of these theories and confirmed through a comprehensive statistical analysis.

*H1a: Religiosity has a positive effect on subjective norms.*

*H1b: Religiosity has a positive effect on perceived behavioral control.*

*H1c: Religiosity has a positive effect on attitude.*

*H1d: Religiosity has a positive effect on intention to purchase halal cosmetics.*

*H2a: Halal knowledge has a positive effect on subjective norms.*

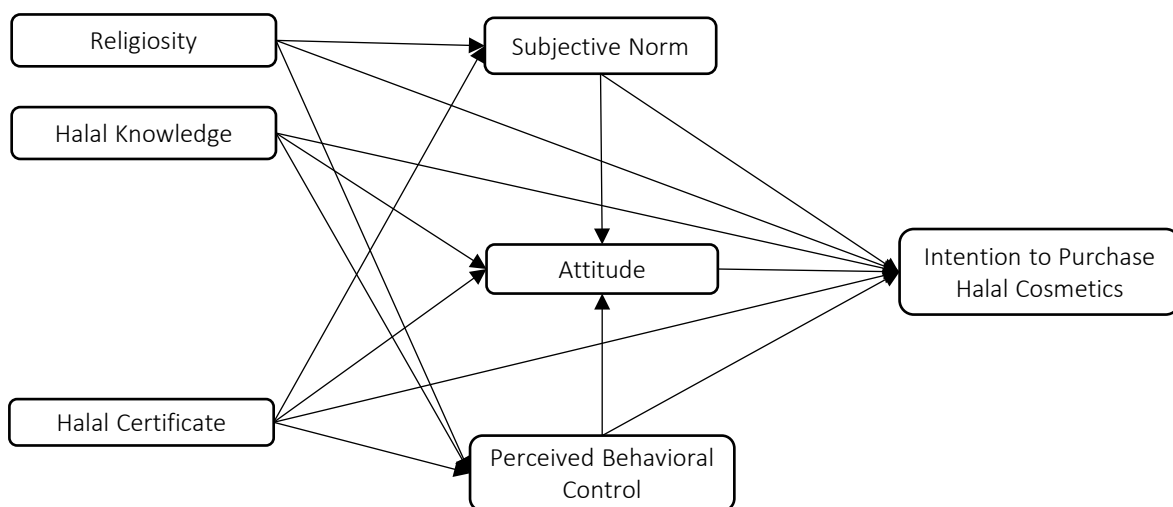
*H2b: Halal knowledge has a positive effect on perceived behavioral control.*

*H2c: Halal knowledge has a positive effect on attitude.*

*H2d: Halal knowledge has a positive effect on intention to purchase halal cosmetics.*

*H3a: Halal certificate has a positive effect on subjective norms.*

*H3b: Halal certificate has a positive effect on perceived behavioral control.*



**Figure 1.** Research framework

- H3c: Halal certificate has a positive effect on attitude.
- H3d: Halal certificate has a positive affects on intention to purchase halal cosmetics.
- H4a: Subjective norms have a positive affects attitude.
- H4b: Subjective norms have a positively affects intention to purchase halal cosmetics.
- H5a: Perceived behavioral control has a positive effect on attitude.
- H5b: Perceived behavioral control has a positive effect on intention to purchase halal cosmetics.
- H6: Attitude has a positively affects on intention to purchase halal cosmetics.

Multiple hypotheses are necessary to comprehensively examine the various relationships between constructs, particularly given the complex nature of consumer behavior in the halal cosmetic industry. The research is grounded in the Theory of Planned Behavior (TPB), which inherently requires multiple factors. Moreover, several moderating and mediating variables were investigated, naturally increasing the number of hypotheses.

It is important to emphasize that each hypothesis was carefully formulated to address spe-

cific relationships within the model, ensuring the study’s scientific rigor and relevance. While 17 hypotheses may seem numerous, they are believed to be essential for fully capturing the intricate dynamics of the model and providing meaningful insights.

### 3. METHODOLOGY

This study was conducted to analyze the factors influencing the purchase intentions of Muslim Generation Z (Gen Z) in Indonesia towards halal cosmetics. A total of 434 female and 302 male respondents were selected using purposive sampling that targeted individuals interested in halal cosmetics.

Data were collected through an online questionnaire distributed via social media platforms, such as WhatsApp, Instagram, and Facebook, over 16 days. The questionnaire was designed with seven constructs, each consisting of three to five items measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The items were adapted from established studies in the field (Abd Rahman et al., 2015; Ishak et al., 2019; Islam & Chandrasekaran, 2020; Khan et al., 2020; Ngah et al., 2021; Sudarsono et al., 2020; Widyanto & Sitohang, 2020). A pretest was administered to 37 respondents to ensure clarity and understanding, and several items were revised before the final distribution.

**Table 1.** Description data

Variables	Description	Female		Male	
		Frequency	Percent	Frequency	Percent
Age Bracket	Under 15 years	3	0.01	1	0.00
	15-20 years	311	0.72	233	0.77
	21- 26 years	116	0.27	66	0.22
	Above 27 years	4	0.01	2	0.01
Education Qualification	Senior high school	29	0.07	29	0.10
	Bachelor	400	0.92	271	0.90
	Master	5	0.01	2	0.01
Monthly Expenditure	Under IDR 100.000	139	0.32	151	0.50
	IDR 110.000-250.000	172	0.40	86	0.28
	IDR 260.000-500.000	94	0.22	45	0.15
	IDR 510.000-750.000	19	0.04	6	0.02
	IDR 760.000-1.000.000	5	0.01	10	0.03
	Above IDR 1.100.000.	3	0.01	1	0.00
Total		434		302	

Note: IDR 15.700 is equal to 1 US Dollar.

After excluding incomplete or invalid responses, the questionnaires has been filled out by 736 Gen Z respondents, -consisting of 434 female and 302 male respondents were used for the final analysis. Table 1 shows that most respondents were aged between 15 and 20 years, with the largest proportion of female (71.16%) and male respondents (77.67%) falling within this age range. Educational level varied, with most respondents being either high school or undergraduate students. The monthly expenditure on cosmetics was reported to range between IDR 110,000 and IDR 250,000 for the majority of respondents.

The data were analyzed using the Structural Equation Modeling Partial Least Squares (SEM-PLS) technique. This method was chosen to test the complex models and examine the relationships between multiple constructs. The analysis was performed to assess the measurement and structural models, ensuring the validity and reliability of the constructs used in the study.

## 4. RESULTS

Table 2 presents the findings of the validity test, indicating that PBC1, an item, has an outer loading value of less than 0.70. This item has to be eliminated since it does not reach the minimum threshold in the validity test, even though it should be able to measure perceived behavioral control data. Each variable's Cronbach's Alpha (CA) value has complied with the minimal criterion of 0.60. Because the value is more than 0.70, and the average variance extracted (AVE) value is 0.50, the composite reliability (CR) score has also been satisfied. Consequently, every variable in this study had trustworthy instruments that could be employed.

Table 3 displays the findings of the discriminant validity analysis, which indicate that for each construct, the square root of the AVE value is larger than the squared AVE value when compared to

**Table 2.** Construct validity

Construct	Item	Female					Male				
		FL	CA	rho_A	CR	AVE	FL	CA	rho_A	CR	AVE
Attitude (AT)	AT1	0.880	0.900	0.904	0.931	0.772	0.907	0.923	0.923	0.946	0.813
	AT2	0.897					0.905				
	AT3	0.924					0.914				
	AT4	0.809					0.881				
Halal Certificate (HC)	HC1	0.864	0.901	0.904	0.931	0.772	0.905	0.896	0.898	0.928	0.762
	HC2	0.907					0.922				
	HC3	0.887					0.936				
	HC4	0.856					0.915				
Halal Knowledge (HK)	HK1	0.830	0.853	0.857	0.900	0.693	0.868	0.939	0.939	0.956	0.846
	HK2	0.847					0.891				
	HK3	0.818					0.848				
	HK4	0.834					0.884				
Intention (IN)	IN1	0.825	0.875	0.876	0.909	0.667	0.864	0.914	0.917	0.936	0.745
	IN2	0.826					0.891				
	IN3	0.833					0.845				
	IN4	0.828					0.883				
	IN5	0.771					0.831				
Perceived Behavioral Control (PBC)	PBC1	0.674	0.758	0.801	0.862	0.679	0.814	0.837	0.848	0.902	0.754
	PBC2	0.871					0.897				
	PBC3	0.908					0.891				
Religiosity (RE)	RE1	0.814	0.806	0.821	0.873	0.632	0.805	0.860	0.860	0.905	0.704
	RE2	0.844					0.878				
	RE3	0.764					0.822				
	RE4	0.754					0.850				
Subjective Norm (SN)	SN1	0.910	0.932	0.933	0.948	0.787	0.915	0.938	0.939	0.953	0.802
	SN2	0.899					0.888				
	SN3	0.902					0.909				
	SN4	0.882					0.897				
	SN5	0.840					0.867				

**Table 3.** Discriminant validity

Gender	Construct	AT	HC	HK	IN	PBC	RE	SN
Female	Attitude	0.878						
	Halal Certificate	0.635	0.879					
	Halal Knowledge	0.611	0.541	0.832				
	Intention	0.523	0.430	0.526	0.817			
	Perceived Behavioral Control	0.413	0.380	0.469	0.545	0.824		
	Religiosity	0.583	0.509	0.522	0.380	0.306	0.795	
	Subjective Norm	0.744	0.551	0.536	0.495	0.372	0.484	0.887
Male	Attitude	0.902						
	Halal Certificate	0.598	0.873					
	Halal Knowledge	0.639	0.548	0.920				
	Intention	0.665	0.558	0.559	0.863			
	Perceived Behavioral Control	0.601	0.491	0.557	0.692	0.869		
	Religiosity	0.526	0.554	0.476	0.460	0.461	0.839	
	Subjective Norm	0.751	0.566	0.588	0.649	0.645	0.450	0.895

the other constructs. The discriminant validity results met the accepted standards. According to Gefen et al. (2000), the square root of the AVE for each construct is greater than the highest correlation with the other constructs, indicating that the findings of this study are legitimate.

According to Hair et al. (2014), the coefficient of determination and the significance level of the coefficient were measured using R<sup>2</sup>. Cosmetics purchasing intentions for females and males, using the R<sup>2</sup> measurement yielded 0.67 (67%) and 0.65 (62%), respectively. This means that 67% and 65% of the variance in the intention to purchase halal cosmetics can be explained by religiosity, halal

knowledge, halal certificate, subjective norm, attitude, and perceived behavioral control in the female and male groups, respectively.

Table 4 shows that religiosity among female Gen Z significantly impacted attitude ( $\beta = 0.170, p = 0.000$ ) and subjective norms ( $\beta = 0.184, p = 0.000$ ). For male Gen Z, religiosity influenced attitude ( $\beta = 0.119, p = 0.014$ ), subjective norms ( $\beta = 0.105, p = 0.092$ ), and perceived behavioral control ( $\beta = 0.181, p = 0.002$ ). Halal knowledge was found to significantly affect attitude, subjective norms, and perceived behavioral control for both genders, while halal certification had a similar impact on both female and male respondents.

**Table 4.** Path coefficients and hypothesis testing

Gender	Hypotheses	Koef	Mean	SD	T-Stat	P-Val	Result
Female	Attitude → Intention	0.134	0.126	0.077	1.736	0.083	Supported
	Halal Certificate → Attitude	0.200	0.199	0.052	3.833	0.000	Supported
	Halal Certificate → Intention	0.028	0.026	0.050	0.560	0.576	Not Supported
	Halal Certificate → Perceived Behavioral Control	0.169	0.178	0.064	2.626	0.009	Supported
	Halal Certificate → Subjective Norm	0.310	0.311	0.053	5.884	0.000	Supported
	Halal Knowledge → Attitude	0.149	0.149	0.052	2.872	0.004	Supported
	Halal knowledge → Intention	0.185	0.187	0.054	3.426	0.001	Supported
	Halal knowledge → Perceived Behavioral Control	0.361	0.359	0.060	6.045	0.000	Supported
	Halal knowledge → Subjective Norm	0.272	0.274	0.048	5.612	0.000	Supported
	Perceived Behavioral Control → Attitude	0.046	0.045	0.034	1.349	0.178	Not Supported
	Perceived Behavioral Control → Intention	0.331	0.333	0.044	7.454	0.000	Supported
	Religiosity → Attitude	0.170	0.170	0.044	3.885	0.000	Supported
	Religiosity → Intention	0.018	0.019	0.048	0.372	0.710	Not Supported
	Religiosity → Perceived Behavioral Control	0.032	0.034	0.053	0.600	0.549	Not Supported
	Religiosity → Subjective Norm	0.184	0.184	0.045	4.088	0.000	Supported
	Subjective Norm → Attitude	0.455	0.455	0.049	9.238	0.000	Supported
	Subjective Norm → Intention	0.149	0.158	0.070	2.120	0.034	Supported



**Table 4 (cont.).** Path coefficients and hypothesis testing

Gender	Hypotheses	Koef	Mean	SD	T-Stat	P-Val	Result
Male	Attitude → Intention	0.225	0.213	0.081	2.764	0.006	Supported
	Halal Certificate → Attitude	0.124	0.129	0.061	2.027	0.043	Supported
	Halal Certificate → Intention	0.131	0.144	0.060	2.177	0.030	Supported
	Halal Certificate → Perceived Behavioral Control	0.189	0.199	0.068	2.772	0.006	Supported
	Halal Certificate → Subjective Norm	0.305	0.309	0.074	4.143	0.000	Supported
	Halal Knowledge → Attitude	0.202	0.210	0.077	2.616	0.009	Supported
	Halal knowledge → Intention	0.053	0.060	0.072	0.744	0.457	Not Supported
	Halal knowledge → Perceived Behavioral Control	0.367	0.363	0.071	5.198	0.000	Supported
	Halal knowledge → Subjective Norm	0.370	0.373	0.086	4.318	0.000	Supported
	Perceived Behavioral Control → Attitude	0.078	0.074	0.062	1.249	0.212	Not Supported
	Perceived Behavioral Control → Intention	0.376	0.370	0.066	5.724	0.000	Supported
	Religiosity → Attitude	0.119	0.116	0.048	2.464	0.014	Supported
	Religiosity → Intention	0.014	0.012	0.048	0.283	0.778	Not Supported
	Religiosity → Perceived Behavioral Control	0.181	0.178	0.058	3.130	0.002	Supported
	Religiosity → Subjective Norm	0.105	0.102	0.062	1.687	0.092	Supported
	Subjective Norm → Attitude	0.458	0.450	0.068	6.765	0.000	Supported
	Subjective Norm → Intention	0.126	0.124	0.073	1.722	0.086	Supported

## 5. DISCUSSION

Cosmetic industrialization was initiated to meet the needs of females identical to beauty through the design of various products, such as powders, lipsticks, and various skincare creams (Nghah et al., 2021). In recent years, Indonesian manufacturers have begun to explore the production of halal cosmetics for both females and males. Industries have tried to explore potential markets from the millennial generation because their amount and character are educated people (Kraljevic & Filipovic, 2017). Most of them have a society or organization that has a significant influence on their lifestyle. However, the product range for females was greater than that for males because of usage percentage. In addition, males are more independent in using cosmetics and tend to follow their needs than females, who consider friends, the surrounding environment, and trends. Nghah et al. (2021) stated that female cosmetic products are designed based on different demographic and climatic regions. Religiosity, halal knowledge, and halal certificates are some of the determining factors of consumers' purchasing intentions are religiosity, halal knowledge, and halal certificate (Haque et al., 2015; Khalek & Ismail, 2015; Khan et al., 2020; Shahid et al., 2018).

Religiosity is an important factor that influences the behavior of Muslim Gen Z members in their daily activities. The data processing results

showed that religiosity affects attitudes and subjective norms for male and female Muslim Gen Z members in making future decisions (Mafabi et al., 2017). Conversely, religiosity affects the choices of Muslim Gen Z members in determining who influences them in making decisions. Muslim Gen Z in Indonesia is first educated about Islam in the family, followed by the school or Taklim Assembly, and then the environment. Islamic knowledge is also a practice of worship, such as prayer and fasting, as well as social activities including cooking, dressing, and decorating. Therefore, religiosity is important in determining Muslim Gen Z attitudes and subjective norms regarding halal cosmetics (Abd Rahman et al., 2015; Nora. Suki & Norb. Suki, 2018).

Meanwhile, Muslim female Gen Z's intention to use halal cosmetics is influenced by halal knowledge from various sources on the use of the products. Females have different demands for their existence than males in the environment. Therefore, they tended to be more sensitive to owning and using cosmetics to appear perfect.

On the other hand, halal certificate affects the intention of male Muslim Gen Z to purchase cosmetics, which indicates that their intention is relatively less than that of their female counterparts. Male Muslim Gen Z members had less intention to look perfect and did not feel the need to use cosmetics to avoid changing their appearance. Besides, they

do not need much consideration when making cosmetic choices because of their limited variations. This indicates that halal knowledge and halal certificates among female and male Gen Z individuals have different priorities in influencing their purchasing intention (Nghah et al., 2021).

Gen Z builds trust in the products they consume based on information obtained from the family, which is the center of their decision-making regarding halal cosmetic products (Handriana et al., 2020). The environment influences the intentions of female and male Gen Z members to use these products. Families, communities, and schools are influential in providing experiences for Gen Z members to practice Islamic values daily (Amalia et al., 2020). The millennial demographic has a stronger preference for elements such as nutrition, taste, and comfort compared with previous generations, which leads to pressure from their references, and they can have attitudes according to social pressures in the group. According to Maison et al. (2019), high religious involvement in the family affects a person's perception of halal product consumption. Besides, several reviews of halal cosmetics conducted by beauty vloggers in several online media platforms have promoted the positive attitude of Muslim Gen Z towards the products (Anubha, 2023). Positive attitude is an important factor for individuals to purchase halal cosmetics in the future (Briliana & Mursito, 2017).

The influence of family and society suggests that Gen Z members pay attention to the allowed or disallowed items. Female and male Gen Z members who are still in high school and university have a fairly high level of dependence on their families because the majority do not earn income.

In Indonesia, children are allowed to leave without parents or siblings, assuming that they have income sources. Similarly, in terms of cosmetics use, they did not differ from their parents or siblings.

The policy implication of this finding is that cosmetic companies must provide complete information about their products so that female Gen Z members can gain confidence while making purchases. Besides, the marketing model is implemented on a massive scale as a strategic step to influence female Gen Z members to purchase cosmetics. Companies need to optimize social media, which is highly popular as a source of social information, and recommend shopping for females to advertise their products (Djafarova & Rushworth, 2017). This can also be done by promoting beauty vloggers, because they are highly influential in lifestyles, specifically in the cosmetic field. In contrast to female Gen Z, their male counterparts paid more attention to the halal logo on cosmetic products while purchasing halal cosmetics. To them, it must give a good impression, as marked by the presence of the halal logo, to increase their purchase intentions.

Companies must consider female and male Gen Z members as the main subjects when designing halal cosmetic marketing strategies and their families. Furthermore, companies must perceive changes because their families and environments influence Gen Z's choices. Gen Z feels that they have a primordial experience while using cosmetics from the same family because of the brands packaging, color, and smell elements that build the impression of closeness to the family. Besides, companies can promote halal cosmetics by collaborating with Islamic boarding schools through academic and nonacademic activities.

---

## CONCLUSION

This study examined the intentions of Indonesian female and male Muslim Gen Z members to purchase halal cosmetics. According to the findings of this study, religiosity and subjective norms significantly influenced the purchasing intentions of Gen Z Muslims in Indonesia regarding halal cosmetics. This study analyzes the factors influencing the buying intentions of female and male Muslim Gen Z individuals, highlighting religiosity as a critical determinant. These findings suggest that halal cosmetic manufacturers should focus more on subjective norms, such as family, friends, and the surrounding environment, while emphasizing religiosity, to reach Muslim Gen Z consumers effectively. However, this study has certain limitations. It primarily focuses on Indonesian Muslim Gen Z members, thus

limiting the generalizability of its findings to other cultural contexts. Future research should include broader demographic variations and conduct comparative analyses to discern differences in purchasing intentions between male and female Muslim Gen Z individuals. Besides, suggestions for future research include parental influences as factors that affect Gen Z people's purchases of halal cosmetics, and adding normative and religious questions to surveys to obtain a better understanding of these relationships.

Finally, further research is required to deepen the understanding of these factors and their implications for marketing strategies in the cosmetics industry. However, this study offers insightful information about the dynamics influencing Muslim Gen Z's purchase intentions for halal cosmetics in Indonesia.

## AUTHOR CONTRIBUTIONS

Conceptualization: Heri Sudarsono.

Data curation: Heri Sudarsono, Retty Ikawati, Siti Nur Azizah.

Formal analysis: Heri Sudarsono, Retty Ikawati.

Investigation: Heri Sudarsono, Retty Ikawati, Siti Nur Azizah, Rusny Istiqomah Sujono.

Methodology: Heri Sudarsono.

Project administration: Retty Ikawati, Siti Nur Azizah, Rusny Istiqomah Sujono.

Supervision: Heri Sudarsono, Retty Ikawati.

Visualization: Siti Nur Azizah, Rusny Istiqomah Sujono, Yeni Fitriyani.

Writing – original draft: Heri Sudarsono, Retty Ikawati, Siti Nur Azizah, Rusny Istiqomah Sujono.

Writing – review & editing: Siti Nur Azizah, Rusny Istiqomah Sujono, Yeni Fitriyani.

## REFERENCES

1. Abd Rahman, A., Asrarhaghighi, E., & Ab Rahman, S. (2015). Consumers and halal cosmetic products: Knowledge, religiosity, attitude and intention. *Journal of Islamic Marketing*, 6(1), 148-163. <https://doi.org/10.1108/JIMA-09-2013-0068>
2. Ahmadova, E., & Aliyev, K. (2021). Determinants of attitudes towards halal products: Empirical evidence from Azerbaijan. *Journal of Islamic Marketing*, 12(1), 55-69. <https://doi.org/10.1108/JIMA-04-2019-0068>
3. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
4. Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Prentice-Hall.
5. Ajzen, I., Lohmann, S., & Albaracin, D. (2005). The influence of attitudes on behavior. In *The Handbook of Attitudes* (pp. 187-236).
6. Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22(5), 453-474. [https://doi.org/10.1016/0022-1031\(86\)90045-4](https://doi.org/10.1016/0022-1031(86)90045-4)
7. Alam, S. S., & Suyuti, N. (2011). Applying the theory of planned behavior (TPB) in halal food purchasing. *International Journal of Commerce and Management*, 21(1), 8-20. <https://doi.org/10.1108/10569211111111676>
8. Ali, A., Sherwani, M., Ali, A., Ali, Z., & Sherwani, S. (2020). The moderating role of individualism/collectivism and materialism: An application of the theory of planned behavior (TPB) in halal food purchasing. *Journal of Food Products Marketing*, 26(9), 581-599. <https://doi.org/10.1080/1045446.2020.1846148>
9. Amalia, F. A., Sosianika, A., & Suhartanto, D. (2020). Indonesian millennials' halal food purchasing: Merely a habit? *British Food Journal*, 122(4), 1185-1198. <https://doi.org/10.1108/BFJ-10-2019-0748>
10. Ambali, A. R., & Bakar, A. N. (2013). Halal food and products in Malaysia: People's awareness and policy implications. *Intellectual Discourse*, 21(1), 7-32. Retrieved from <https://journals.iium.edu.my/intdiscourse/index.php/id/article/view/504>
11. Annabi, C. A., & Ibadapo-Obe, O. O. (2017). Halal certification organizations in the United Kingdom: An exploration of halal cosmetic certification. *Journal of Islamic Marketing*, 8(1), 107-126. <https://doi.org/10.1108/JIMA-06-2015-0045>
12. Anubha. (2023). Mediating role of attitude in halal cosmetics purchase intention: An ELM perspective. *Journal of Islamic Marketing*, 14(3), 645-679. <https://doi.org/10.1108/JIMA-04-2021-0112>
13. Aqdas, R., & Amin, A. (2020). Islamic perspective in consumer behaviour: Effect of halal awareness and halal logo with mediating role of purchase intention. *Hamdard Islamicus*, 43(2), 89-107. Retrieved from <https://hamdardislamicus.com.pk/index.php/hi/article/view/49>

14. Aufl, F., & Aji, H. M. (2021). Halal cosmetics and behavior of Muslim women in Indonesia: The study of antecedents and consequences. *Asian Journal of Islamic Management*, 3(1), 11-22. Retrieved from <https://journal.uui.ac.id/AJIM/article/view/18143>
15. Aziz, Y. A., & Chok, N. V. (2013). The role of halal awareness, halal certification, and marketing components in determining halal purchase intention among Non-Muslims in Malaysia: A structural equation modeling approach. *Journal of International Food and Agribusiness Marketing*, 25(1), 1-23. <https://doi.org/10.1080/08974438.2013.723997>
16. Bashir, A. M. (2019). Effect of halal awareness, halal logo and attitude on foreign consumers' purchase intention. *British Food Journal*, 121(9), 1998-2015. <https://doi.org/10.1108/BFJ-01-2019-0011>
17. Bashir, A. M., Bayat, A., Oluatase, S. O., & Abdul Latiff, Z. A. (2018). Factors affecting consumers' intention towards purchasing halal food in South Africa: A structural equation modelling. *Journal of Food Products Marketing*, 25(1), 26-48. <https://doi.org/10.1080/10454446.2018.1452813>
18. Biro Pusat Statistik. (2021). *Hasil sensus penduduk 2020. Berita Resmi Statistik: Vol. 07/01/Th X*. Retrieved from <https://www.bps.go.id/id/pressrelease/2021/01/21/1854/hasil-sensus-penduduk--sp2020-pada-september-2020-men-catat-jumlah-penduduk-sebesar-270-20-juta-jiwa-.html>
19. Briliana, V., & Mursito, N. (2017). Exploring antecedents and consequences of Indonesian Muslim youths' attitude towards halal cosmetic products: A case study in Jakarta. *Asia Pacific Management Review*, 22(4), 176-184. <https://doi.org/10.1016/j.apmr.2017.07.012>
20. Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior*, 68, 1-7. <https://doi.org/10.1016/j.chb.2016.11.009>
21. Elshaer, I., Sobaih, A. E. E., Alyahya, M., & Abu Elnasr, A. (2021). The impact of religiosity and food consumption culture on food waste intention in Saudi Arabia. *Sustainability (Switzerland)*, 13(11), 1-17. <https://doi.org/10.3390/su13116473>
22. Forghani, M. H., Kazemi, A., & Ranjbarian, B. (2019). Religion, peculiar beliefs and luxury cars' consumer behavior in Iran. *Journal of Islamic Marketing*, 10(2), 673-688. <https://doi.org/10.1108/JIMA-06-2018-0101>
23. Garg, P., & Joshi, R. (2018). Purchase intention of "Halal" brands in India: The mediating effect of attitude Article. *Journal of Islamic Marketing*, 9(3), 683-694. <https://doi.org/10.1108/JIMA-11-2017-0125>
24. Gefen, D., Straub, D., & Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 4(7), 1-77. <https://doi.org/10.17705/1CAIS.00407>
25. Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121. <https://doi.org/10.1108/EBR-10-2013-0128>
26. Handriana, T., Yulianti, P., Kurniawati, M., Arina, N. A., Aisyah, R. A., Ayu Aryani, M. G., & Wandira, R. K. (2020). Purchase behavior of millennial female generation on halal cosmetic products. *Journal of Islamic Marketing*, 12(7), 1295-1315. <https://doi.org/10.1108/JIMA-11-2019-0235>
27. Haque, A., Anwar, N., Tarofder, A. K., Ahmad, N. S., & Sharif, S. R. (2018). Muslim consumers' purchase behavior towards halal cosmetic products in Malaysia. *Management Science Letters*, 8(12), 1305-1318. <https://doi.org/10.5267/j.msl.2018.9.009>
28. Haque, A., Sarwar, A., Yasmin, F., Tarofder, A. K., & Hossain, M. A. (2015). Non-muslim consumers' perception toward purchasing halal food products in Malaysia. *Journal of Islamic Marketing*, 6(1), 133-147. <https://doi.org/10.1108/JIMA-04-2014-0033>
29. Hashim, A. J. C. M., & Musa, R. (2013). Modeling the effects on the attitude of young adult urban Muslim women towards halal cosmetic products: New insights for championing the halal economy. *International Journal of Education and Research*, 1(7), 1-8. Retrieved from <https://www.ijern.com/journal/July-2013/42.pdf>
30. Herlina, M., Rifai, N. A. K., Sholeh, N. S. M., & Kurniaty, N. (2020). Halal awareness of muslim millennials toward cosmetics and skincare decision. *Advances in Social Science, Education and Humanities Research*, 409(SoRes 2019), 38-44. <https://doi.org/10.2991/assehr.k.200225.010>
31. Holdsworth, S., Sandri, O., Thomas, I., Wong, P., Chester, A., & McLaughlin, P. (2019). The assessment of graduate sustainability attributes in the workplace: Potential advantages of using the theory of planned behaviour (TPB). *Journal of Cleaner Production*, 238. <https://doi.org/10.1080/13504622.2019.1700218>
32. Iranmanesh, M., Mirzaei, M., Parvin Hosseini, S. M., & Zailani, S. (2020). Muslims' willingness to pay for certified halal food: An extension of the theory of planned behaviour. *Journal of Islamic Marketing*, 11(1), 14-30. <https://doi.org/10.1108/JIMA-03-2018-0049>
33. Ishak, S., Che Omar, A. R., Khalid, K., Intan, I. S., & Hussain, M. Y. (2019). Cosmetics purchase behavior of educated millennial Muslim females. *Journal of Islamic Marketing*, 11(5), 1055-1071. <https://doi.org/10.1108/jima-01-2019-0014>
34. Islam, T., & Chandrasekaran, U. (2020). Religiosity and consumer decision-making styles of young Indian Muslim consumers. *Journal of Global Scholars of Marketing Science*, 30(2), 147-169. <https://doi.org/10.1080/21639159.2019.1679031>
35. Jin, B., & Kang, J. H. (2011). Purchase intention of Chinese

- consumers toward a US apparel brand: A test of a composite behavior intention model. *Journal of Consumer Marketing*, 28(3), 187-199. <https://doi.org/10.1108/07363761111127617>
36. Khalek, A. A., & Ismail, S. H. S. (2015). Why are we eating halal – using the theory of planned behavior in predicting halal food consumption among generation Y in Malaysia. *International Journal of Social Science and Humanity*, 5(7), 608-612. <https://doi.org/10.7763/IJSSH.2015.V5.526>
  37. Khan, N., Sarwar, A., & Tan, B. C. (2020). Determinants of purchase intention of halal cosmetic products among generation Y consumers. *Journal of Islamic Marketing*, 12(8), 1461-1476. <https://doi.org/10.1108/JIMA-11-2019-0248>
  38. Kraljevic, R., & Filipovic, Z. (2017). Gender differences and consumer behavior of millennials. *Acta Economica Et Turistica*, 03(1), 1-13. <https://doi.org/10.1515/aet-2017-0002>
  39. Mafabi, S., Nasiima, S., Muhimbise, E. M., Kasekende, F., & Nakiyonga, C. (2017). The mediation role of intention in knowledge sharing behavior. *VINE Journal of Information and Knowledge Management Systems*, 47(2), 172-193. <https://doi.org/10.1108/VJIKMS-02-2016-0008>
  40. Maison, D., Marchlewska, M., Zein, R. A., & Herison. (2019). Religiously permissible consumption: The Influence of the halal label on product perceptions depending on the centrality of religiosity. *Journal of Islamic Marketing*, 10(3), 948-960. <https://doi.org/10.1108/JIMA-07-2018-0119>
  41. Ngah, A. H., Gabarre, S., Han, H., Rahi, S., Al-Gasawneh, J. A., & Park, S. H. (2021). Intention to purchase halal cosmetics: Do males and females differ? a multigroup analysis. *Cosmetics*, 8(1), 1-14. <https://doi.org/10.3390/cosmetics8010019>
  42. Rakrachakarn, V., Moschis, G. P., Ong, F. S., & Shannon, R. (2015). Materialism and life satisfaction: The role of religion. *Journal of Religion and Health*, 54(2), 413-426. <https://doi.org/10.1007/s10943-013-9794-y>
  43. Riswandi, W. N., Sudarsono, H., Rahmi, A. N., & Hamza, A. (2022). The intention of the young Muslim generation to purchase halal cosmetics: Do religiosity and halal knowledge matter? *Asian Journal of Islamic Management*, 4(2), 150-162. <https://doi.org/10.20885/AJIM.vol4.iss2.art6>
  44. Shahid, S., Ahmed, F., & Hasan, U. (2018). A qualitative investigation into consumption of halal cosmetic products: The evidence from India. *Journal of Islamic Marketing*, 9(3), 484-503. <https://doi.org/10.1108/JIMA-01-2017-0009>
  45. Souiden, N., & Rani, M. (2015). Consumer attitudes and purchase intentions toward Islamic banks: the influence of religiosity. *International Journal of Bank Marketing*, 33(2), 143-161. <https://doi.org/10.1108/IJBM-10-2013-0115>
  46. Sudarsono, H., Ikawati, R., Kurnia, A., Azizah, S. N., & Kholid, M. N. (2024). Effects of religiosity, halal knowledge and halal certification on the intention of Muslims to use the halal vaccine during Covid-19 pandemic. *Journal of Islamic Marketing*, 15(1), 79-100. <https://doi.org/10.1108/JIMA-06-2021-0179>
  47. Sudarsono, H., Ikawati, R., Azizah, S. N., Kurnia, A., & Nuanmark, P. (2023). Does “Halalness” affect young Muslims’ intentions to use the COVID-19 vaccine? *Indonesian Journal of Halal Research*, 5(1), 30-40. <https://doi.org/10.15575/ijhar.v5i1.19248>
  48. Sudarsono, H., Nuri, R., & Nugrohowati, I. (2020). Determinants of the intention to consume halal food, cosmetics and pharmaceutical products. *Journal of Asian Finance, Economics and Business*, 7(10), 831-841. <https://doi.org/10.13106/jafeb.2020.vol7.no10.831>
  49. Suki, N. M., & Suki, N. M. (2018). Halal cosmetic products: Do knowledge and religiosity affect consumers’ attitude and intention to use? *International Journal of Engineering & Technology*, 7(4.38), 764-767. <https://doi.org/10.14419/ijet.v7i4.38.27540>
  50. Suparno, C. (2020). Online purchase intention of halal cosmetics: S-O-R framework application. *Journal of Islamic Marketing*, 12(9), 1665-1681. <https://doi.org/10.1108/JIMA-09-2019-0192>
  51. Widyanto, H. A., & Sitohang, I. A. T. (2020). Muslim millennials’ purchase intention of halal-certified cosmetics and pharmaceutical products: The mediating effect of attitude. *Journal of Islamic Marketing*, 13(6), 1373-1394. Retrieved from <https://www.emerald.com/insight/content/doi/10.1108/JIMA-04-2020-0117/full/html?skipTracking=true>