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Halal Beauty Unveiled: Investigating Repurchase Intentions for South Korean Cosmetics among Indonesian Muslim Consumers

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Abstract: Indonesia holds the distinction of being the most populous nation with a Muslim majority globally. Nevertheless, there is a significant demand for halal-certified cosmetic products, particularly those originating from South Korea, among individuals who are passionate about cosmetics. Hence, the primary objective of this research is to examine the determinants that impact the inclination of Indonesian Muslim customers to repurchase cosmetic items lacking halal certification. The foundation of this study framework is rooted in the stimulus-organism-response (SOR) model. The present study examined 259 samples, revealing a significant association between celebrity endorsement and the enhancement of both attitude and brand image. The influence of brand image on the intention to repurchase halal-certified cosmetic items is also beneficial. In contrast, consumers' attitude does not influence their desire to repurchase cosmetics, provided that the products maintain their halal certification. Religiosity does not possess the capacity to regulate the association between attitude and repurchase intention.

Keywords: Celebrity endorsement; attitude; brand image; religiosity; repurchase intention; Islamic marketing

1. Introduction

The cosmetics market on a global scale had a consistent pattern of expansion spanning from 2004 to 2022, except for a drop observed in 2020 (Petruzzi, 2023a). The skincare product category has witnessed the highest level of growth, accounting for 42% of the overall global market expansion. The expansion of the cosmetics sector significantly impacts both corporate entities and national economies, such as that of Indonesia. The chemical, pharmaceutical, and traditional medicine sectors, encompassing cosmetics, substantially contribute to Indonesia's gross domestic product (GDP) of IDR 59.88 trillion, with a growth rate of 6.67% in 2022 compared to the preceding year (Petruzzi, 2023b).

The expansion of the halal cosmetics sector can be observed as a consequence of the overall growth experienced by the cosmetics industry. According to Raju and Roshan (2022), the valuation of the worldwide halal cosmetics industry in 2020 amounted to 30,685.40 million dollars. It is anticipated that this market will grow at 15.2% and attain a value of 144,816.10 million dollars by

2031. The halal cosmetic market in Indonesia exhibits a favorable growth trajectory, with projections indicating an annual growth rate of 8% through 2025. According to Declan (2023), Indonesia ranks as the second largest consumer of halal cosmetics on a global scale. The growth of the halal cosmetics industry in Indonesia is primarily driven by the substantial Muslim population, which accounts for 86.7% or 237.56 million individuals (AHK Indonesia, 2022; Rizaty, 2022), the Indonesian government has shown its support for this industry by enacting Law Number 33 of 2014, which focuses on ensuring the guarantee of halal products.

Despite the worldwide halal cosmetics market experiencing favorable advancements, the proportion of Muslim expenditure on halal cosmetic items remains at a modest 13.9% of the overall global sales in the cosmetics industry. According to Statista (2023b), the global expenditure by Muslim consumers on halal cosmetic items in 2021 amounted to a substantial sum of 70 billion dollars. Statista (2023a) also reported that the worldwide revenue generated from cosmetic sales in the same year reached a noteworthy figure of 503.6 billion dollars. This observation suggests that there continues to be a demand for conventional cosmetics among Muslim consumers even though these products are not certified as halal. In Indonesia, it is worth noting that there is a notable demand for non-halal-certified cosmetics, with a particular emphasis on a product originating from South Korea.

The rising popularity of the Korean Wave in Indonesia, particularly among the younger generation, has also significantly impacted millennials. Unconsciously, the youth in Indonesia are embracing Korean culture, which is propagated through K-Pop and K-sensations, such as beauty products (including skincare and health products) (Trisandri *et al.*, 2024). The growing popularity of South Korean cosmetic products among Indonesian customers is shown in the consistent upward trend in the export levels of these products to Indonesia. Furthermore, it is worth noting that there was a substantial rise in the export of cosmetics from South Korea to Indonesia during 2014-2019, as indicated by Statista (2023c). The brand image of South Korean cosmetic products, often linked to the country's entertainment industry, including Korean Drama and Korean Pop, featuring aesthetically pleasing artists and singers, is a significant factor contributing to the elevated export value and consumer preference for these products. This association fosters a heightened demand for K-Beauty demonstrating customers' desire to resemble their idols (Bailleux & Menache, 2021).

The presence of a significant Muslim consumer base in Indonesia who opt to persist in using non-halal certified cosmetic products, particularly those originating from South Korea, poses a formidable obstacle for the halal cosmetic industry in Indonesia to effectively compete with conventional cosmetics, particularly those lacking halal certification from South Korea. Hence, the present study endeavors to comprehend the factors contributing to the purchasing behavior of Muslim consumers who continue to acquire cosmetics from South Korea that lack halal certification. This investigation examines the impact of celebrity endorsement, brand image, and attitude within the framework of the stimulus-organism-response model.

This research was adapted from the work of Ngah *et al.* (2023), whose study provided significant insights into the factors influencing consumer behavior towards halal products. The constructs and items in Ngah *et al.*'s research served as a foundational framework for developing the questionnaire used in this study, ensuring that the measures were consistent with prior validated research. By building upon their work, this research seeks to extend the understanding of consumer preferences, particularly in the context of non-halal-certified cosmetics from South Korea among Muslim consumers in Indonesia. This connection allows for a more robust comparison of findings and contributes to the existing literature on halal consumer behavior. The remainder of this paper is structured with method section, which outlines the research methodology, including data collection and analysis techniques. Result section presents the results of the study, followed by a discussion of the findings in discussion section. Finally, the last section which is conclusion provides the conclusion, implications, and suggestions for future research.

2. Methodology

2.1 Data source

Data acquisition in this study was carried out by distributing questionnaires online using the Google form. The sampling method in this study used a non-probability sampling method with purposive sampling. This means that findings from sample studies cannot be conclusively generalized to the population (Sekaran & Bougie, 2016). Respondent criteria in this study were Muslim, had a formal or informal Islamic education background, were 18-34 years old, used cosmetic products from South Korea, and knew about halal cosmetic products. This study used a Likert scale of 1-5 (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) with 28 core questions.

2.2 Research method

This research model refers to the previous research model conducted by Ngah *et al.* (2023) entitled "I love my cosmetics: educated young Muslims' behavior of non-halal certified cosmetics" who conducted a similar study. In research conducted by authors of cosmetic brands not yet halal certified, they focused on cosmetic brands from South Korea and the research was conducted in Indonesia. The research framework used in this study is shown in Figure 1. The analytical method used in this study was carried out in several stages:

- 1. Perform a wording test.
- 2. Perform a pre-test. The pre-test was conducted on 33 respondents to answer questionnaire questions.
- 3. The data is processed using SmartPLS 4 to test the validity and reliability of the data obtained.
 - 4. Perform the main test.

The main test analysis was carried out using partial least squares SEM (PLS-SEM) because this study aimed to predict the target construct or identify the factors that make up the construct (Hair et al., 2017). The research model in this study involves the analysis of higher-order constructs, which have two layers or construct layers, commonly called the hierarchical component model (HCM). HCM is necessary to reduce the number of relationships in the structural model to make the model easier to understand. In this study, the celebrity endorsement variable is a higher-order

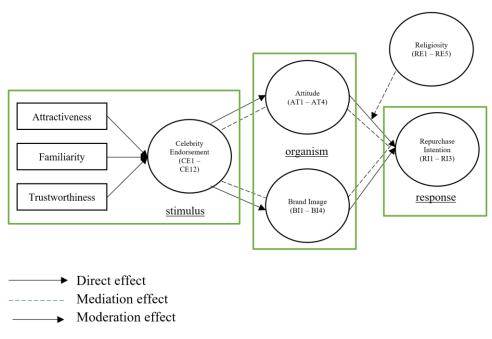


Figure 1. The research framework

construct variable with attractiveness, familiarity, and trustworthiness variables as a lower-order construct with the reflective-formative HCM type (Hair *et al.*, 2017). The relationship between the lower-order and higher-order constructs is a formative relationship, while all lower-order construct variables are measured using reflective indicators.

2.3 Questionnaire

In this research, the questionnaire employed was adapted from the work of Ngah et al. (2023), as seen in Appendix 1. The items in the questionnaire were designed based on the constructs used in their study, ensuring that the questions are relevant and align with the research objectives. This adaptation allowed for a comprehensive analysis of the factors influencing consumer behavior, particularly in the context of halal and non-halal cosmetics, while maintaining consistency with established methodologies.

2.4 Research hypothesis

In this research, the hypothesis and the literature that supports our argument are presented in Table 1. These hypotheses were developed based on prior literature, ensuring a strong theoretical and empirical foundation. For example, H1: Celebrity endorsement has a positive effect on the attitude of Muslim consumers is supported by studies such as Albert et al. (2017), who emphasize that celebrity endorsements shape consumer attitudes through aspirational appeal and trustworthiness. Branchik and Chowdhury (2017) highlight the significance of cultural alignment in endorsements, particularly among religiously conscious consumers. McCormick (2016) underscores the role of celebrities in fostering favorable consumer attitudes, while Ngah et al. (2023) extended this understanding to Muslim consumers, noting that culturally sensitive endorsements resonate more deeply with this demographic. H2: Celebrity endorsement has a positive effect on the brand image of cosmetic products that are not halal certified is similarly supported by research. Chan et al. (2013) argue that celebrity endorsements enhance brand image by associating products with positive qualities. Rai et al. (2021) and Kim et al. (2017) further establish that endorsers can help brands overcome image-related barriers, even for sensitive products like non-halal-certified cosmetics. H3: Brand image has a positive effect on the attitude of Muslim consumers draws from studies like Handriana et al. (2020) and Ngah et al. (2023), which demonstrate that a strong brand image reinforces positive consumer attitudes. H4: Brand image has a positive effect on repurchase intention for cosmetic products that are not halal certified is backed by Yu et al. (2018), Ali et al. (2021), and Ngah et al. (2023), who highlight the pivotal role of brand image in influencing repeat purchase behavior, even in culturally sensitive markets. H5: Attitude has a positive influence on repurchase intention for cosmetic products that are not halal certified is supported by Ngah et al. (2023) and Abd Rahman et al. (2015), who argue that a positive consumer attitude is a strong predictor of repurchase intention. H6: Attitude mediates the relationship between celebrity endorsement and repurchase intention of cosmetic products that are not halal certified is grounded in the work of Zhu et al. (2020) and Yu et al. (2021), which detail the mediating effects of consumer attitudes in complex purchasing decisions.

The remaining hypotheses further build on the interplay of these variables. H7: Brand image mediates the relationship between celebrity endorsement and repurchase intention of cosmetic products that are not halal certified and H8: Attitude and brand image sequentially mediate the relationship between celebrity endorsement and repurchase intention of cosmetic products that are not halal certified explore how these mediating factors influence consumer behavior. Finally, H9: The relationship between attitude and repurchase intention for cosmetic products that are not halal certified will weaken when religiosity is high is supported by Khraim (2010), Shahid *et al.* (2018), and Ngah *et al.* (2022), who highlighted that religiosity moderates consumer decision-making, particularly for products that are not perceived as fully aligned with religious values. These hypotheses collectively provide a comprehensive framework for understanding the effects of celebrity endorsements, brand image, and consumer attitudes on repurchase intentions.

Table 1. The research hypotheses

Hypothesis	Literature
H1: Celebrity endorsement has a positive effect on the attitude of Muslim consumers	Albert et al. (2017); Branchik and Chowdhury (2017); McCormick (2016); Ngah et al. (2023)
H2: Celebrity endorsement has a positive effect on the brand image of	Chan et al. (2013); Kim et al. (2017);
cosmetic products that are not halal certified	Rai et al. (2021)
H3: Brand Image has a positive effect on the attitude of Muslim consumers	Handriana et al. (2021); Ngah et al. (2023)
H4: Brand Image has a positive effect on repurchase intention on cosmetic products that are not halal certified	Ali et al. (2021); Ngah et al. (2023); Yu et al. (2018)
H5: Attitude has a positive influence on repurchase intention for cosmetic products that are not yet halal-certified.	Abd Rahman et al. (2015); Ngah et al. (2023)
H6: Attitude mediates the relationship between celebrity endorsement and repurchase intention of cosmetic products that are not halal certified	
H7: Brand Image mediates the relationship between celebrity endorsement and repurchase intention of cosmetic products that are not halal certified	Yu et al. (2021); Zhu et al. (2020)
H8: Attitude and brand image sequentially mediate the relationship between celebrity endorsement and repurchase intention of cosmetic products that are not halal certified	
H9: The relationship between attitude and repurchase intention for cosmetic products that are not halal certified will weaken when religiosity is high.	Khraim (2010); Ngah et al. (2023); Shahid et al. (2018)

3. Results

3.1 Analysis of low order construct measurement models

In processing data in this study, researchers used a two-stage approach, namely the first stage of processing data on low order construct variables, namely attractiveness, familiarity, and trustworthiness variables. In the measurement model analysis three tests were carried out, validity test, reliability test, and discriminant validity test, as shown in Table 2. SmartPLS software was used to produce the results reported in Tables 2-10.

The reliability test in this study measured Cronbach's alpha and composite reliability values to see internal consistency; the acceptable Cronbach's alpha and composite reliability values were \geq 0.60 to \leq 0.90. The validity test is measured by looking at the average variance extracted (AVE) value and the outer loading value. The AVE value must be \geq 0.50 so that the research results can be said to be valid. While the value of the outer loading is \geq 0.70, the indicator is said to be valid and can be maintained. In contrast, if the outer loading value is 0.4 – 0.7, the indicator must consider eliminating the indicator. The indicator is eliminated; if the indicator is removed, it will increase the value of AVE and composite reliability, and if the outer loading value is <0.40, then the indicator can be eliminated. Based on Table 2, after eliminating the CE5, Reli3, and Reli5 indicators, Cronbach's alpha, composite reliability, AVE, and outer loading values were by the validity and reliability test criteria.

Discriminant validity test to measure the extent to which a variable is truly different from other variables by empirical standards (Hair *et al.*, 2017). In this study, the discriminant validity test was measured using the Fornell-Larcker test to determine the correlation between each variable and other variable, as shown in Table 3. In the Fornell-Larcker test, each variable must have a greater value to the variable itself compared to other variables. Based on Table 2 it can be seen that each variable has the greatest value to the variable itself compared to other variables.

3.2 Analysis of the high order construct measurement model

In this study, the celebrity endorsement variable is a higher order construct variable with a formative relationship to its sub-dimensions, namely attractiveness, familiarity, and trustworthiness. Then an analysis of the measurement model is carried out by following the rules of the formative measurement model.

Table 2. Main Test Reliability and Validity Test

		Rel	iability	Conver	gent Validity
Variable	Indicator	Cronbach's Alpha	Composite Reliability	AVE	Outer Loading
		(≥0.6)	(≥0.6)	(≥0.5)	(>0.7)
Celebrity Endorsement	CE1				
	CE2				0.865
Attractiveness	CE3	0.793	0.804	0.707	0.865
	CE4				0.791
	CE5				***
To an illinoista	CE6	0.875	0.878	0.800	0.868
Familia ri ty	CE7	0.873	0.878	0.800	0.913
	CE8				0.901
	CE9				0.833
TT1.*	CE10	0.002	0.904	0.776	0.907
Trustworthiness	CE11	0.903			0.890
	CE12				0.891
	ATT1	0.858	0.859	0.701	0.841
	ATT2				0.843
Attitude	ATT3				0.824
	ATT4				0.841
	BI1				0.795
D 11	BI2	0.050	0.860	0.703	0.867
Brand Image	BI3	0.858			0.869
	BI4				0.819
	RI1				0.916
Repurchase Intention	RI2	0.897	0.902	0.829	0.900
-	RI3				0.916
	RE1				0.882
ļ	RE2				0.729
Religiosity	RE3	0.640	0.756	0.563	***
Ŭ,	RE4				0.617
ļ	RE5				***

Note: *** Indicator removed because it is not valid

Table 3. Fornell-Larcker Discriminant Validity Test

	1	2	3	4	5	6	7
Attitude (1)	0.837						
Attractiveness (2)	0.558	0.841					
Brand Image (3)	0.403	0.329	0.838				
Familiarity (4)	0.439	0.709	0.253	0.894			
Repurchase Intention (5)	0.086	0.107	0.476	0.122	0.911		
Religiosity (6)	0.341	0.216	0.154	0.151	-0.083	0.599	
Trustworthiness (7)	0.467	0.652	0.288	0.668	0.179	0.127	0.881

In testing the formative measurement model, the first stage is to look at convergent validity to assess whether the variables used are by the model and see the correlation of construct measurements where the path coefficient value is ≥ 0.70 (Hair *et al.*, 2017). Table 4 shows that the celebrity endorsement variable has fulfilled the convergent validity criteria because it has a path coefficient value of 0.758. Then, a collinearity test was carried out by looking at the VIF value, with the criteria for the VIF value having to be ≤ 0.50 (Hair *et al.*, 2017). The three variables met the criteria where the VIF value of attractiveness was 2.275, familiarity was 2.360, and trustworthiness was 2.040. Lastly, test the significance and relevance of the outer weight to see the contribution of formative indicators to the construct, so this test is necessary to provide a decision regarding the use of formative indicators in further analysis. If the p-value is less than 0.50, the indicator is said to be significant and can be calculated. However, if the p-value is more than 0.50, the researcher must look at the value of the outer loading indicator. The indicator can be maintained if the outer

loading value is more than 0.50 (Hair *et al.*, 2017). Based on above, it can be seen that all indicators have a p-value and an outer loading of 0.00, so it can be said that all indicators have met the formative measurement test standards.

Collinearity test was conducted to see whether there is a correlation between variables that can cause multicollinearity problems, as shown in Table 5. The collinearity test is carried out by looking at the Variance Inflation Factor (VIF) value, if the VIF value <5 then multicollinearity does not occur (Hair *et al.*, 2017). It can be seen from Table 4 that each variable has a VIF value <5 so it can be concluded that the model does not have multicollinearity and meets the collinearity test criteria.

The coefficient determination test was carried out to measure the predictive power of the model and the coefficient is measured as the squared correlation between the endogenous variables and the predicted value, where the higher the R² value, the more accurate the construct prediction (Hair *et al.*, 2017). Based on Table 6, the attitude variable has an R² value of 0.355, which means that the attitude variable can be explained by the celebrity endorsement and brand attitude variables of 35.5%. The brand image variable can be explained by the celebrity endorsement variable of 10.1%. The celebrity endorsement variable can be explained by the attractiveness, familiarity, and trustworthiness variables of 99.5%. And the repurchase intention variable can be explained by the attitude and repurchase intention variables of 26.4%.

The effect size test was carried out to see changes in the R² value when certain exogenous constructs were removed from the model and could be used to evaluate whether the removed construct had a substantive impact on the endogenous construct. The criterion for assessing the effect size is if the effect size values are 0.02, 0.15, and 0.35, respectively, representing small, medium, and large effects (Hair *et al.*, 2017). Based on Table 7, it can be seen that the attitude variable has a very small effect on repurchase intention because it has a value of 0.005, the brand image variable on attitude has a small effect size effect because it has a value of 0.091, brand image on repurchase intention has a moderate effect with a moderate effect size value, namely of 0.326, celebrity endorsement on attitude has a small effect size of 0.299, celebrity endorsement on brand image has a small effect on r square with a value of 0.113, and moderation on religiosity and attitude has a very small effect.

Table 4. Formative Measurement Model Test

Variable	Indicator	Convergent Validity (≥0.70)	VIF (≤5)	P value (≤0.05)
	Attractiveness		2.275	0.000
Celebrity Endorsement	Familia r ity	0.758	2.360	0.000
	Trustworthiness		2.040	0.000

Table 5. Collinearity test results

	Attitude	Brand Image	Celebrity Endorsement	Repurchase Intention
Attractiveness			2.275	
Familiarity			2.360	
Trustworthiness			2.040	
Brand Image	1.113			1.200
Celebrity Endorsement	1.113	1.000		
Attitude				1.331
Repurchase Intention				
Religiosity				1.336
Religiosity × Attitude				1.273

Table 6. R² Test Results

	R-square
Attitude	0.355
Brand Image	0.101
Celebrity Endorsement	0.995
Repurchase Intention	0.264

Stone-Geisser Test to measure the predictive power of the out-of-sample model. In a structural model, a Q² value greater than zero indicates the predictive relevance of the path model for certain dependent constructs (Hair *et al.*, 2017). Based on Table 8, all variables have a value greater than zero, so it can be said that this model is sufficiently predictive of relevance.

The path coefficient significance test was carried out to see the magnitude of the influence and the relationship between exogenous and endogenous variables. The path coefficient value has a standard between -1 and +1. If the path coefficient value is close to +1, then the relationship between variables is said to be strong and positive, and vice versa. If the path coefficient value is close to -1, then the variable relationship is said to be strong and negative (Hair *et al.*, 2017). The variable relationship is significant if it has a p-value > 0.05 and a t-value of more than 1.645.

Based on Table 9, the relationship between attractiveness and repurchase intention, brand image and attitude, brand image and repurchase intention, celebrity endorsement and attitude, celebrity endorsement, and brand image, familiarity with celebrity endorsement, and trustworthiness with celebrity endorsement has a significant positive relationship because of the p-value. -value <0.05, t-value is more than 1.645 and has a positive path coefficient value.

However, two relationships are insignificant: the attitude variable relationship to repurchase intention and the moderating variable religious x attitude to repurchase intention. The relationship between these two variables is insignificant because they have a t-value <1.645 and a p-value > 0.05, namely a t-value of 1.169 and 0.552 and a p-value of 0.242 and 0.581, respectively.

Based on Table 10, the brand image variable mediates between the celebrity endorsement variable and repurchase intention with the full mediation type because it only has an indirect one with a t-value of more than 1.645 so it is declared significant. Meanwhile, when the brand image variable mediates celebrity endorsement and attitude variables, it has a partial mediation type, because both direct and indirect effects are significant, with a t-value greater than 1.645. Meanwhile, the attitude variable does not have a mediating effect, so attitude does not act as a mediator.

Table 7. Effect Size Test Results

	Effect Size	Conclusion
Attitude → Repurchase Intention	0.005	Very low influence
Brand Image → Attitude	0.091	Low Influence
Brand Image → Repurchase Intention	0.326	Moderate Influence
Celebrity Endorsement → Attitude	0.299	Moderate Influence
Celebrity Endorsement → Brand Image	0.113	Little low
Religiosity × Attitude → Repurchase Intention	0.009	Very low influence

Table 8. Q2 test result

	Q^2
Attitude	0.237
Brand Image	0.063
Celebrity Endorsement	0.586
Repurchase Intention	0.184

Table 9. Significance Test Results for Path Coefficient

	Path Coefficient	T-Value	P-Value	Conclusion
Attitude → Repurchase Intention	-0.072	1.169	0.242	Not significant
Attractiveness → Celebrity Endorsement	0.347	20.224	0.000	Positive significant
Brand Image → Attitude	0.255	3.538	0.000	Positive significant
Brand Image → Repurchase Intention	0.536	11.248	0.000	Positive significant
Celebrity Endorsement → Attitude	0.463	6.092	0.000	Positive significant
Celebrity Endorsement → Brand Image	0.318	3.666	0.000	Positive significant
Familiarity → Celebrity Endorsement	0.350	24.083	0.000	Positive significant
Trustworthiness → Celebrity Endorsement	0.430	22.223	0.000	Positive significant
Religiosity × Attitude → Repurchase Intention	0.044	0.552	0.581	Not significant

Table 10. Mediation Test Results

	Indirect effect	Significance	Direct effect	Significance	Conclusion
Celebrity Endorsement → Brand Image → Attitude → Repurchase Intention	0.978	Not significant	Null	1	No mediation
Celebrity Endorsement → Attitude → Repurchase Intention	1.162	Not significant	Null	-	No mediation
Celebrity Endorsement → Brand Image → Repurchase Intention	3.659	significant	Null	-	Full mediation
Brand Image → Attitude → Repurchase Intention	1.066	Not significant	0.000	significant	No mediation
Celebrity Endorsement → Brand Image → Attitude	2.530	Not significant	0.000	significant	Partial mediation

4. Discussion

This research was conducted to discuss and analyze the factors that can influence the intention to repurchase non-halal cosmetics among Muslim consumers in Indonesia. In this study, the celebrity endorsement variable significantly positively affects attitude and brand image variables. This can be explained using social influence theory, where celebrity endorsements influence consumer attitudes through identification and internalization. When consumers buy advertised products to be like these celebrities, it will positively influence ideas or ideas for these products. Then, when a brand does a celebrity endorsement, the celebrity who becomes the brand ambassador will transfer their image to the brand used.

The brand image variable also significantly positively affects attitude and repurchase intention. A good brand image from consumers will create trust and promote a positive attitude. In addition, a positive brand image is also a sign that consumers have a good perception of the brand. When consumers have a good perception, it increases consumer intention to repurchase cosmetic products that are not yet halal certified. A good brand image will give consumers a positive attitude towards the product; a good brand image will also affect the increase in repurchase intention of cosmetic products that have not been halal certified. In addition, the brand image variable can also mediate the relationship between celebrity endorsement and repurchase intention with full mediation.

However, the attitude and religiosity variables as moderators do not significantly affect the repurchase intention variable. The significance of the attitude variable to the repurchase intention variable shows that even though the respondent has a good idea or opinion about cosmetics that are not yet halal certified, this attitude has not made the respondent want to repurchase the cosmetic product. One of the reasons is that Indonesian consumers prefer local brands to global brands, including brands from South Korea (Suryati, 2021). Meanwhile, the religiosity variable cannot moderate the relationship between attitude and repurchase intention because consumers do not fulfill all dimensions of religiosity, especially the consequence dimension (El-Menouar, 2014). In addition, the attitude variable also cannot moderate the relationship between celebrity endorsement and repurchase intention because attitude does not affect repurchase intention.

The findings of this research have important policy implications for both regulatory bodies and businesses in the cosmetics industry, particularly concerning the enforcement of halal certification regulations in Indonesia. First, the Indonesian government needs to strengthen its monitoring and enforcement mechanisms to ensure compliance with the October 17, 2026, mandate for halal certification. This could include imposing stricter regulations on offline stores, preventing them from selling uncertified products, and requiring businesses to obtain halal certification from BPJPH (Badan Penyelenggara Jaminan Produk Halal) as a condition for shop permits. Additionally, regulators should consider developing more comprehensive global halal standards for cosmetic products to align Indonesia with international markets, thus promoting consumer protection and trust. For businesses, these findings suggest that integrating strategies like celebrity endorsement and building a strong brand image could drive repurchase intentions, especially if they ensure that brand ambassadors align with consumer values, including religiosity and professionalism.

This study faces several limitations that need to be addressed in future research. First, the study focuses solely on South Korean cosmetics, which may limit the generalizability of the findings to other global or local cosmetic brands. Second, the study was conducted among Muslim consumers in Indonesia, so the results may not fully represent Muslim consumers in other countries with different cultural, economic, or religious dynamics. Additionally, the research did not account for other variables, such as personal preferences or price sensitivity, which could influence repurchase intention. Lastly, the research did not explore the effect of dynamic shifts in religiosity over time, which might affect consumer behavior differently under varying social or economic contexts. Future studies could benefit from incorporating a broader scope of product categories, consumer characteristics, and longitudinal analyses to provide a more comprehensive understanding of the factors influencing repurchase intentions for non-halal cosmetics.

5. Conclusion

This study complements prior research by focusing on South Korean cosmetics as the object of study, particularly due to the prevalent presence of uncertified products in Indonesia's market. Despite the popularity and availability of these products, they lack halal certification. This research examines the utilization of uncertified South Korean cosmetics by Indonesian Muslim consumers. While prior studies linked attitude to repurchase intentions, this study found no such association. This suggests differing consumption patterns between Indonesia and Malaysia. Even with a positive attitude towards a product, it doesn't consistently translate to repurchase intention for uncertified cosmetics. Recommendations emerge for cosmetic businesses, especially those offering halal products. Utilizing reputable brand ambassadors who are not only physically appealing but also possess professional skills and public trust can be effective. Additionally, enhancing brand image can stimulate repurchase intentions, with supply and purchase accessibility being crucial factors. Businesses should leverage various distribution channels, both online and offline, to facilitate easy product access for consumers. The research highlights the prevalence of uncertified South Korean cosmetics in Indonesia, necessitating corrective action from the Indonesian government regarding global halal regulations for cosmetic products. While halal certification fulfillment is mandated by October 17, 2026, the Indonesian government should restrict offline stores from selling uncertified products and require BPJPH-approved halal certification for shop permits. This would align with the relevant legislation.

Originality statement

The authors declare that the work reported in the current study is original, and no content (concept, text, tables, illustrations, data, etc.) supposed/assumed to be produced/generated/estimated/written/collected by the authors is partially or completely generated through Artificial Intelligence (AI) or any AI-based software.

Appendix 1. Research Questionnaire

The questionnaire in this study consists of three sections: screening questions, core questions, and respondent profiles. It begins with an introduction that provides the author's identity, the research title, objectives, and instructions for completing the questionnaire, including incentives for respondents. The introduction also includes a consent statement affirming the respondents' willingness to participate and provide honest data. Screening questions ensure that respondents meet the specified criteria by asking about their Islamic status, Islamic education, age, use of South Korean cosmetic products, and awareness of halal cosmetic products. The respondent profile section includes demographic questions such as gender, age, residence, highest education, the number of South Korean cosmetic products used, monthly income, monthly expenditure, and information about the brands and types of cosmetic products used.

Table A. The variables, description and indicators (Ngah et al., 2023).

Variable	Description		Operational Indicators
Celebrity Endorsement	Celebrity Endorsement is the promotion of products using celebrities to help enhance or alter individuals' perceptions of the brand, resulting from some form of social identification (Albert <i>et al.</i> , 2017).	CE1	Overall, I like the celebrity figures who are brand ambassadors for the products I use
		CE2	I think the brand ambassadors for the products I use are attractive
		CE3	I think the brand ambassadors for the products I use are classy
Attractiveness	Perceived physical appeal and charm of the celebrity endorsing a product (Ngah et al., 2023).	CE4	I think the brand ambassadors for the products I use are beautiful or good-looking
		CE5	I think the brand ambassadors for the products I use are sexy or physically attractive
		CE6	I am familiar with the brand ambassadors for the products I use
Familiarity	The extent to which consumers are familiar with and can identify the celebrity promoting a product (Ngah <i>et al.</i> ,	CE7	I know the brand ambassadors for the products I use
	2023).	CE8	I have heard of the brand ambassadors
		CE9	for the products I use The brand ambassadors for the products I use are reliable
	Perceived reliability and integrity of the celebrity endorsing a product (Ngah et al., 2023).	CE10	The brand ambassadors for the products I use are honest
Trustworthiness		CE11	The brand ambassadors for the products I use are sincere
		CE12	The brand ambassadors for the products I use are trustworthy
	Attitude is a cognitive disposition that can influence an individual's response to an object related to it (Yu <i>et al.</i> , 2018).	AT1	Using the cosmetic products, I use now is a good idea
		AT2	Using the cosmetic products, I use now is a wise choice
Attitude		AT3	I like the idea of using the products I use now
		AT4	Using the cosmetic products, I use now is fun
		BI1	The non-halal-certified cosmetic products I use now have different product characteristics than their competitors
	Brand image or brand perception is a set of brand	BI2	The non-halal-certified cosmetic products I use suit me
Brand Image	associations recorded in consumers' memory, which generates perceptions about the brand (Chinomona, 2016).	BI3	The non-halal-certified cosmetic products that I use is one of the best brands in its category
		BI4	The non-halal certified cosmetic products that I use have sales stock that is able to meet consumer demand in the market
		RI1	I intend to continue to buy non-halal certified cosmetics in the future
Repurchase Intention	Repurchase intention refers to a consumer's decision to purchase a product from the same brand as in a previous	RI2	I will always try to buy non-halal certified products in my daily life
	purchase (Shahid et al., 2022).	RI3	I plan to continue to use non-halal certified cosmetics often
		RE1	I happily and willingly pay my zakat on time
	Religiosity is a person's belief in divinity and commitment	RE2	I enjoy spending time with other people who are related to my religion
Religiosity	to following the principles established by the Almighty (Widyanto & Sitohang, 2021).	RE3	I often attend religious lectures
	7 0/ /	RE4	I often read about religion both online and offline
			I often watch religious programs

References

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

- AHK Indonesia. (2022). *Indonesian Halal cosmetic segment continues to sparkle*. AHK Indonesian https://indonesian.ahk.de/infothek/news/news-details/indonesian-halal-cosmetic-segment-continues-to-sparkle
- Albert, N., Ambroise, L., & Valette-Florence, P. (2017). Consumer, brand, celebrity: Which congruency produces effective celebrity endorsements?. *Journal of Business Research*, 81, 96–106. https://doi.org/10.1016/j.jbusres.2017.08.002
- Ali, A., Sherwani, M., Ali, A., Ali, Z., & Sherwani, M. (2021). Investigating the antecedents of halal brand product purchase intention: An empirical investigation. *Journal of Islamic Marketing*, 12(7), 1339–1362. https://doi.org/10.1108/JIMA-03-2019-0063
- Bailleux, V. & Menache, A. (2021). The Korean skincare conquest: A qualitative study about Korean skincare product's popularity in France (Master's thesis). Umeå University. https://www.diva-portal.org/smash/record.jsf?pid=diva2:1601766
- Branchik, B. J., & Chowdhury, T. G. (2017). Men Seeing Stars: Celebrity Endorsers, Race, and The Male Consumer. *Journal of Marketing Theory and Practice*, 25(3), 305–322. https://doi.org/10.1080/10696679.2017.1311216
- Chan, K., Leung Ng, Y., & Luk, E. K. (2013). Impact of celebrity endorsement in advertising on brand image among Chinese adolescents. *Young Consumers*, 14(2), 167–179. https://doi.org/10.1108/17473611311325564
- Chinomona, R. (2016). Brand communication, brand image and brand trust as antecedents of brand loyalty in Gauteng Province of South Africa. *African Journal of Economic and Management Studies*, 7(1), 124–139. https://doi.org/10.1108/AJEMS-03-2013-0031
- Declan, T. (2023). Muslim consumer expenditure on cosmetics worldwide in 2021, by leading country (in billion U.S. dollars). https://remote-lib.ui.ac.id:6499/statistics/795040/global-muslim-expenditure-on-cosmetics/
- El-Menouar, Y. (2014). The five dimensions of Muslim religiosity. Results of an empirical study. *Methods, Data, Analyses, 8*(1), 26. https://doi.org/10.12758/mda.2014.003
- Hair, J. F., Black, W. C., & Babin, B. J. (2017). *Multivariate Data Analysis: A Global Perspective*. Pearson Education.
- Handriana, T., Yulianti, P., Kurniawati, M., Arina, N. A., Aisyah, R. A., Ayu Aryani, M. G., & Wandira, R. K. (2021). 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
- Khraim, H. (2010). Measuring religiosity in consumer research from an Islamic perspective. *Journal of Economic and Administrative Sciences*, 26(1), 52–78. https://doi.org/10.1108/10264116201000003
- Kim, T., Seo, H. M., & Chang, K. (2017). The impact of celebrity-advertising context congruence on the effectiveness of brand image transfer. *International Journal of Sports Marketing and Sponsorship*, 18(3), 246–262. https://doi.org/10.1108/IJSMS-08-2017-095
- McCormick, K. (2016). Celebrity endorsements: Influence of a product-endorser match on Millennials attitudes and purchase intentions. *Journal of Retailing and Consumer Services*, 32, 39–45. https://doi.org/10.1016/j.jretconser.2016.05.012
- Ngah, A. H., Tuan Mansor, T. M., Gabarre, C., Rahi, S., Khan, S., & Ahmad, R. (2023). I love my cosmetics: Educated young Muslim's behaviour of non-halal certified cosmetics. *Journal of Islamic Marketing*, 14(11), 2798–2820. https://doi.org/10.1108/JIMA-06-2021-0196
- Petruzzi, D. (2023a). Annual growth of the global cosmetics market from 2004 to 2022. https://remote-lib.ui.ac.id:6499/statistics/297070/growth-rate-of-the-global-cosmetics-market/
- Petruzzi, D. (2023b). Breakdown of the cosmetic market worldwide 2022, by geographic zone. https://remote-lib.ui.ac.id:6499/statistics/243959/breakdown-of-the-cosmetic-market-worldwide-by-geographic-zone/
- Rai, J. S., Yousaf, A., Itani, M. N., & Singh, A. (2021). Sports celebrity personality and purchase intention: The role of endorser-brand congruence, brand credibility and brand image transfer. Sport, Business and Management: An International Journal, 11(3), 340–361. https://doi.org/10.1108/SBM-06-2020-0062
- Raju, & Roshan. (2022). Halal Cosmetics Market by Product Type (Personal Care Products, Color Cosmetics, Fragrances), by Application (Hair Care, Skin Care, Face Care, Beauty Care), by Distribution Channel (Offline, Online): Global Opportunity Analysis and Industry Forecast, 2020-2031. https://www.alliedmarketresearch.com/press-release/halal-cosmetics-market.html

- Rizaty, M. A. (2022). *Indonesia's Muslim Population Largest in the World in 2022* [Jumlah Penduduk Muslim Indonesia Terbesar di Dunia pada 2022]. Data Indonesia. https://dataindonesia.id/ragam/detail/populasi-muslim-indonesia-terbesar-di-dunia-pada-2022
- Sekaran, U., & Bougie, R. (2016). Research Methods For Business: A Skill Building Approach. John Wiley & Sons. https://books.google.co.id/books?id=Ko6bCgAAQBAJ
- 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
- Shahid, S., Parray, M. A., Thomas, G., Farooqi, R., & Islam, J. U. (2022). Determinants of Muslim consumers' halal cosmetics repurchase intention: An emerging market's perspective. *Journal of Islamic Marketing*, 14(3), 826–850. https://doi.org/10.1108/JIMA-08-2021-0265
- Statista. (2023a). Revenue of the beauty & personal care market worldwide from 2014 to 2027. https://remote-lib.ui.ac.id:6499/forecasts/1244578/beauty-and-personal-care-global-market-value?locale=en
- Statista. (2023b). Total value of halal consumer spending worldwide in 2021 and forecast for 2025, by category. https://remote-lib.ui.ac.id:6499/statistics/1232904/global-halal-consumer-spending-value-by-category/
- Statista. (2023c). Production value of cosmetics in South Korea from 2014 to 2022(in trillion South Korean won). Statista. https://www.statista.com/statistics/710003/south-korea-cosmetics-production-value/
- Suryati. (2021). Ipsos Global Trends 2021: Online Shopping and Local Products Dominate Indonesian Consumer Choices [Ipsos Global Trends 2021: Belanja Online dan Produk Lokal Dominasi Pilihan Konsumen Indonesia]. Ipsos. https://www.ipsos.com/sites/default/files/ct/news/documents/2021-12/%5BPress%20Release%5D%20Ipsos%20Global%20Trends%202021%20-%20Belanja%20Online%20dan%20Produk%20Lokal%20Dominasi%20Pilihan%20Konsumen%20Indonesia.pdf
- Trisandri, M. I. R., Alkautsar, S. A., & Saleh, M. Z. (2024). Skincare Marketing In Indonesia: A South Korean Popular Culture Phenomenon [Pemasaran Skincare Di Indonesia: Sebuah Fenomena Budaya Populer Korea Selatan]. *Jurnal Manajemen Riset Inovasi*, 2(1), 221–228. https://doi.org/10.55606/mri.v2i1.2215
- Widyanto, H. A., & Sitohang, I. A. T. (2021). Muslim millennial's purchase intention of halal-certified cosmetics and pharmaceutical products: The mediating effect of attitude. *Journal of Islamic Marketing*, 13(6), 1373–1394. https://doi.org/10.1108/JIMA-04-2020-0117
- Yu, M., Liu, F., Lee, J., & Soutar, G. (2018). The influence of negative publicity on brand equity: Attribution, image, attitude and purchase intention. *Journal of Product & Brand Management*, 27(4), 440–451. https://doi.org/10.1108/JPBM-01-2017-1396
- Yu, Z., Klongthong, W., Thavorn, J., & Ngamkroeckjoti, C. (2021). Understanding rural Chinese consumers' behavior: A stimulus–organism–response (S-O-R) perspective on Huawei's brand loyalty in China. *Cogent Business & Management*, 8(1), 1880679. https://doi.org/10.1080/23311975.2021.1880679
- Zhu, L., Li, H., Wang, F.-K., He, W., & Tian, Z. (2020). How online reviews affect purchase intention: A new model based on the stimulus-organism-response (S-O-R) framework. *Aslib Journal of Information Management*, 72(4), 463–488. https://doi.org/10.1108/AJIM-11-2019-0308



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