

THE IMPACT OF AGE ON GENERATION Z'S PURCHASE INTENTION FOR HALAL COSMETICS BETWEEN MALAYSIA AND INDONESIA

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Abstract

The global halal cosmetics sector has expanded rapidly in recent years, owing to increased consumer awareness of halal compliance, ethical production, and product safety. Due to their evolving consumption patterns and robust engagement with digital platforms, Generation Z is one of the most influential consumer segments in the cosmetics market. Nonetheless, there is a paucity of research investigating the impact of demographic variables, such as age, on halal cosmetic shopping behavior within this generational cohort, especially in cross-national settings. This study looks into how age affects Generation Z's propensity to buy halal cosmetics in Malaysia and Indonesia. An online questionnaire survey was used to gather data from 145 respondents using a quantitative research approach. The associations between halal awareness, halal knowledge, religiosity, social influence, and purchase intention were examined using partial least squares structural equation modeling (PLS-SEM). The data demonstrate that halal awareness, halal knowledge, and religiosity have a considerable impact on purchase intention for halal cosmetic items, whereas social influence has a lower effect. The structural model has a moderate predictive value, explaining 52.3% of the variance in purchase intention. The findings also imply that consumer sentiments toward halal cosmetics are moderated by age, especially among older members of Generation Z who exhibit greater levels of religious commitment and awareness. By offering empirical insights on Southeast Asian generational consumption trends, these findings add to the body of knowledge on halal consumer behavior. For cosmetic producers, marketers, and legislators looking to boost the halal cosmetics business in Malaysia and Indonesia, the report also provides useful recommendations.

Keyword: Age, Generation Z's, Halal Cosmetics, Purchase Intention

Introduction

In the last few years, the global halal industry has grown quickly and now includes more than just food. It also includes fashion, cosmetics, tourism, and pharmaceuticals. The halal cosmetics industry is one of the fastest-growing parts of these sectors. This is because more and more Muslim consumers are

becoming aware of ethical consumption, religious compliance, and product safety. In 2023, Muslim consumers around the world spent about USD 87 billion on cosmetics and personal care products. This shows that there is a growing demand for halal-certified beauty products in many markets. Southeast Asia is now one of the most important places for halal

cosmetics development. Malaysia and Indonesia are seen as two of the most important countries in the global halal beauty ecosystem because they have large Muslim populations, strong regulatory frameworks, and active cosmetic industries.

Muslim consumer spending is expected to increase to US\$3.36 trillion by 2028 from US\$2.43 trillion in 2023 across major halal economy sectors, such as food, pharmaceuticals, cosmetics, modest fashion, travel, and media & entertainment. Islamic finance assets, on the other hand, were valued at US\$4.93 trillion and are projected to reach US\$7.53 trillion by 2028. 81 nations were ranked according to their enabling ecosystems by the Global Islamic Economy Indicator (GIEI). For the eleventh year, Malaysia remained at the top, followed by Bahrain, Saudi Arabia, Indonesia, and the United Arab Emirates. Notably, Senegal moved up 18 spots to 25th, and Pakistan made its debut appearance in the top 10. With US\$1.53 billion and US\$1.60 billion in completed deals, respectively, the UAE and Indonesia were the leading locations for investments pertinent to the Islamic economy

Consumers today have higher awareness and a greater sense of consciousness, leading to the demand for quality products and services. Such expectation has led to the rise of halal-certified products among Muslim and non-Muslim consumers. Muslim consumer population was estimated at 1.6 billion as of 2020 (Usman et al., 2021) and is expected to reach 2.2 billion by 2030. The halal industry is estimated to be worth US\$2.2tn in 2019 and is expected to amass 3.2 trillion in 2024 (Ab Talib et al., 2020). Halal studies have gained tremendous interest in marketing, management, and supply chain fields consistent with Muslim demand. However, general consumer behaviors in purchasing halal-certified products is still underdeveloped and requires further investigation in its critical research stream and themes for future development

Literature Review

The Growing Halal Economy and Halal Cosmetics

The halal industry has expanded from a small religious market to a global commercial sector that includes food, medicines, cosmetics, tourism, and financial services. Due to Muslim consumers' increased awareness of ethical consumerism and religious compliance, halal cosmetics have drawn more attention among these sectors. According to Golnaz et al. (2010), halal cosmetics are beauty and personal care products that adhere to Islamic principles, making sure that ingredients, production methods, and distribution procedures satisfy halal standards. In addition to adhering to hygienic and ethical production standards, these requirements include the absence of ingredients that are forbidden, such as alcohol and pork derivatives. The market for

halal cosmetics has increased significantly, especially in areas like Southeast Asia where Muslims predominate. Due to their sizable Muslim populations, supportive legal systems, and active halal certification programs, Malaysia and Indonesia are largely acknowledged as important markets within the worldwide halal ecosystem. According to research, the market for halal cosmetics is still growing as customers give more weight to ethical and religious principles when making purchases (Yakin et al., 2023; Rahman et al., 2015). Halal cosmetics are becoming more and more popular not only among Muslims but also among non-Muslims who believe that halal certification indicates superior safety, quality, and ethical production standards. Recent research also shows that consumer knowledge and lifestyle factors influence halal cosmetics consumption in addition to religious obligations. The idea of living a halal lifestyle has grown in popularity among younger customers, especially those who look for goods that reflect their own values and beliefs. Because of this, cosmetic companies are increasingly integrating ethical production methods, halal certification, and ingredient sourcing transparency into their marketing campaigns.

The Important Consumer Segment of Generation Z.

Generation Z, which is defined as people born between 1997 and 2012, has emerged as one of the most prominent consumer groups in the global marketplace. This generation is distinguished by its strong digital connectedness, extensive exposure to social media platforms, and growing awareness of ethical and sustainable consumption behaviors (Abd Rahman, Asrarhaghighi & Rahman, 2015). Generation Z consumers are more inclined than earlier generations to seek thorough information on product ingredients, brand values, and corporate social responsibility prior to making a purchase decision. Generation Z is a particularly important market segment in the cosmetics business due to their high engagement with beauty trends and digital marketing channels. Peer recommendations, social media influencers, and internet reviews frequently have an impact on their purchasing decisions. As a result, cosmetic companies are increasingly relying on digital marketing and social media channels to reach and engage this population. According to a number of studies, Generation Z consumers, especially in nations with a majority of Muslims, show a great interest in halal items (Abdul Jabar et al., 2024). Their knowledge of halal certification is frequently influenced by internet exposure to halal-related content, family influence, and religious education. According to empirical research, consumers in Generation Z typically have favorable opinions on halal cosmetics, particularly when those goods are linked to religious compliance, ethical

manufacturing, and product safety (Abdul Jabar et al., 2024). According to research done in Indonesia, young Muslim consumers are particularly interested in halal cosmetics because they are becoming more conscious of halal lifestyles and religious identities (Sudarsono et al., 2024).

Intention to Purchase Halal Cosmetics.

Purchase intention refers to the chance of a consumer purchasing a specific product or service in the future. Purchase intention is commonly acknowledged in marketing research to be a powerful predictor of actual purchasing activity. The idea is frequently addressed using behavioral theories such as the Theory of Planned Behavior (TPB) and the Theory of Reasoned Action (TRA), which argue that attitudes, subjective standards, and perceived behavioural control all influence consumer intentions (Ajzen, 1991). Purchase intention in the context of halal cosmetics indicates consumers' propensity to select halal-certified cosmetics over traditional substitutes. Purchase intention has been found to be influenced by a number of important elements, including social influence, halal awareness, attitudes toward halal items, and religion. Research indicates that customers' inclination to buy halal cosmetics is greatly increased by favorable sentiments of these items (Jannah & Indra, 2024). According to Riswandi et al. (2023), those who have a stronger religious commitment are more likely to favor halal-certified products, which is another reason why religiosity has been repeatedly found to be a significant factor of halal consumer behavior. Additionally, consumer behavior is significantly influenced by halal understanding. Customers who are more knowledgeable about halal certification, halal ingredients, and halal manufacturing methods are more inclined to buy halal products and to build a deeper sense of trust in them. Research shows that young customers, notably Generation Z, are greatly influenced by halal understanding when making purchases (Ramadhany, 2024).

Comparative Setting: Indonesia and Malaysia

Malaysia and Indonesia are two of the most important halal marketplaces in Southeast Asia. Both countries have sizable Muslim populations and

robust institutional frameworks that promote halal certification and regulation. However, variances in cultural customs, religious organizations, and consumer lifestyles may have varying effects on halal consumption trends between countries. Malaysia has positioned itself as a global halal hub, with internationally recognized certification standards and significant government support for the halal sector. On the other side, Indonesian customers frequently exhibit strong religious motivation while making purchases, especially when it comes to halal goods (Tia and Anita, 2024). According to comparative studies, Malaysian consumers may give more weight to lifestyle aspects and brand perception, but Indonesian customers typically display higher degrees of religion in their buying decisions (Tia and Anita, 2024). Examining halal cosmetic consumption in Malaysia and Indonesia offers important insights into regional consumer behavior patterns considering these contextual variables. A comparative study can be used to determine whether age and other demographic factors have a comparable or different impact on purchase intention in these two marketplaces.

Methodology

This study adopts a quantitative, comparative research design to examine the influence of age on Generation Z's purchase intention for halal cosmetics in Malaysia and Indonesia. A cross-sectional survey method was employed to collect data from respondents in both countries. This study was conducted to analyze the age impact of age of Generation Z (Gen Z) in Malaysia and Indonesia towards halal cosmetics. The target population consisted of Generation Z consumers (born 1997–2012) in Malaysia and Indonesia. A stratified random sampling technique was used to ensure representation across age groups and regions. Data was collected via an online self-administered questionnaire, distributed through social media platforms (e.g., Instagram, WhatsApp, Twitter) and university networks. Consent was obtained from all participants, and parental consent was secured for minors. The total number of respondent is 145.

Result and Discussion

Table 1: Respondent Demographic

Demographic Variable	N	%
Gender		
Female	120	82.8
Male	25	17.2
Age		
13-17 years	16	11.1
18-22 years	104	71.7
23-27 years	25	17.2

Education Level		
PMR	2	1.4
SPM/STPM	39	26.9
Diploma	66	45.5
Degree	38	26.2
Religion		
Muslim	139	95.9
Non-Muslim	6	4.1
Origin Country		
Malaysia	112	77.2
Indonesia	33	22.8

In examining the demographic composition of the surveyed population, a total of 145 respondent were participated in this study. The majority of respondents (approximately 72%) fall within the 18–22 age group, indicating that the dataset strongly represents mid-Generation Z consumers, who are typically university students or young adults. Most respondents are from Malaysia (77%), while 23% are from Indonesia. This allows comparison between the two countries, although the Malaysian sample is

larger. Approximately 83% of respondents are female, which is expected in cosmetic-related studies since females are generally the primary consumers of cosmetic products. The findings indicate that Generation Z consumers show a strong intention to purchase halal cosmetics, driven primarily by halal knowledge and awareness, personal values, confidence in halal certification and social recommendation.

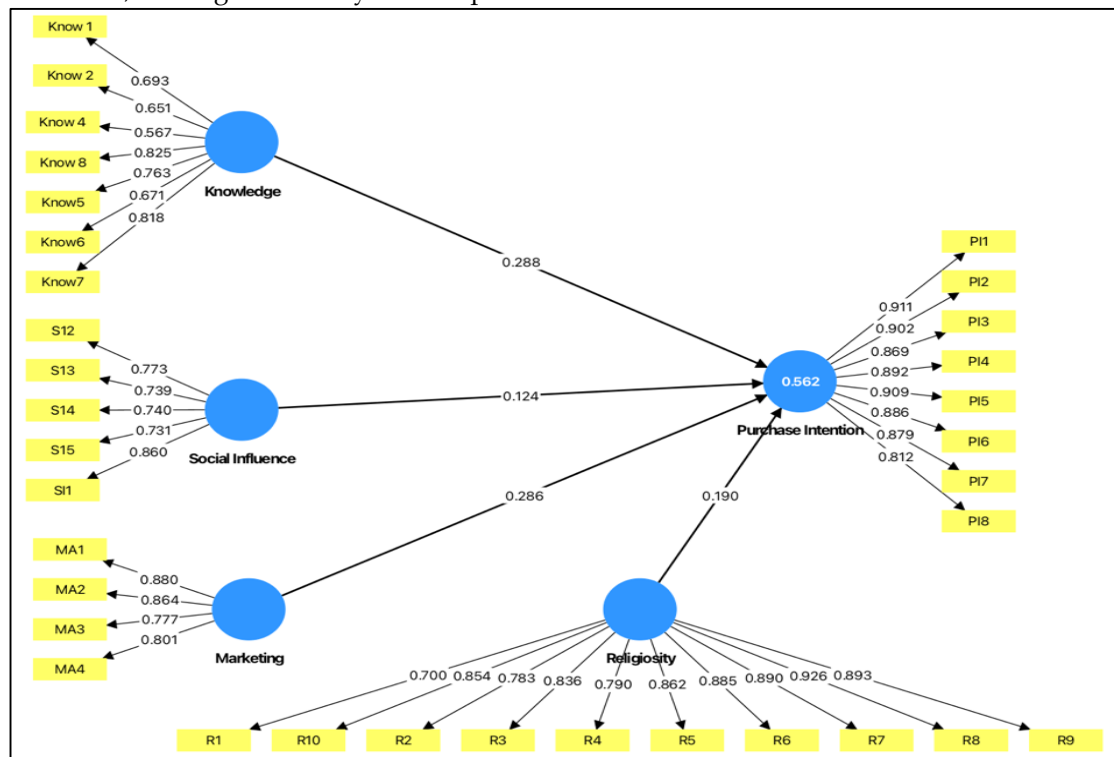


Figure 1: Result for outer Model

Validity and Reliability Test

In PLS SEM, two types of validity are evaluated: convergent and discriminant. The Average Variance Extracted (AVE) and Loading Factor data are used to determine convergent validity. When each variable's AVE and Loading Factor values surpass 0.5, it indicates adequate convergent validity (Hair et al., 2014). Contrarily, discriminant validity is demonstrated using Cross Loading and Square Roots AVE, where the Cross Loading value must be

greater than 0.7, and the Square Roots AVE value must be greater than the correlation value of all variables (M. S. Rahman et al., 2021). Additionally, the reliability test uses the composite reliability value and Cronbach's Alpha to assess internal consistency. According to the usual guideline (rule of thumb), a loading factor indicator value of 0.7 is considered effective. According to the findings of this study, the outer loading values are greater than 0.7, indicating their effectiveness (Khan et al., 2020).

Table 2: Illustration The Result of Convergent Validity and Construct Validity

Item	Outer Loading	AVE	Alpha	CR
Knowledge				
Know1	0.693	0.516	0.842	0.865
Know2	0.651			
Know4	0.567			
Know5	0.763			
Know6	0.763			
Know7	0.818			
Marketing				
MA1	0.880	0.692	0.852	0.870
MA2	0.864			
MA3	0.777			
MA4	0.801			
Social Influence				
SI1	0.860	0.594	0.594	0.830
SI2	0.773			
SI3	0.739			
SI4	0.740			
SI5	0.731			
Religiosity				
R1	0.700	0.713	0.713	0.964
R2	0.783			
R3	0.836			
R4	0.790			
R5	0.862			
R6	0.885			
R7	0.890			
R8	0.926			
R9	0.893			
R10	0.854			
Purchase Intention				
PI1	0.911	0.780	0.780	0.960
PI2	0.902			
PI3	0.869			
PI4	0.892			
PI5	0.909			
PI6	0.886			
PI7	0.879			
PI8	0.812			

Source: Data Processed (2026)

The findings for convergent validity and construct reliability indicate that all variables in this study have strong convergence validity. This is supported by Average Variance Extracted (AVE) values that exceed 0.5 and significant factor loadings. The knowledge, and Religiosity variables have higher convergent validity, as indicated by all items in both variables having loading factors more than 0.5.

Furthermore, all variables have a high level of reliability, as seen by Cronbach's alpha and composite reliability (CR) values greater than 0.7. This demonstrated the internal consistency of the measurement tools used. As a result, these findings provide confidence in the measurement instruments' reliability for assessing the constructs under research.

Table 3: Fornell-Larker criterion

	Knowledge	Marketing	Purchase Intention	Religiosity	Social Influence
Knowledge	0.718				
Marketing	0.664	0.832			
Purchase Intention	0.641	0.675	0.883		
Religiosity	0.474	0.603	0.576	0.844	

Social Influence	0.585	0.666	0.601	0.620	0.770
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Source: Data Processed (2026)

The Fornell-Larcker criterion is a technique used in partial least squares (SEM-PLS) analysis to evaluate the validity of model constructs. This criterion assesses the precision with which the latent variables (constructs) in the model are measured by their associated indicators. The Fornell-Larcker

Criterion value of each construct is higher than the correlation between the constructs in the model, as the accompanying table illustrates. This indicates that the constructs in the estimated model meet the requirements for discriminant validity based on the Fornell-Larcker Criterion value.

Table 4: Linear Regression

Regression Statistics	
R-square	0.562
Adjusted R-square	0.550
SRMR	0.071
Chi-square	1200.184
NFI	0.748

Table 4 shows the results of the ordinary linear regression analysis, with an R-Square of 0.562 and an Adjusted R-Square of 0.550. These numbers show that the independent variables in the model can adequately explain the dependent variable. Furthermore, the SRMR score of 0.071 indicates that the model is accurate in estimating the covariance

between variables. The Chi-Square score of 1200.184 and the NFI of 0.748 show that the regression model is reasonably well fitted to the observed data. Overall, these findings indicate that the regression model adequately explains the variation in the data and is consistent with the observational data.

Table 5: Hypothesis test analysis Result

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	P values
Knowledge	0.842	0.841	0.024	0.000
Marketing	0.852	0.852	0.025	0.000
Purchase Intention	0.959	0.959	0.007	0.000
Religiosity	0.955	0.955	0.007	0.000
Social Influence	0.828	0.828	0.028	0.000

Table 5 present the result of the hypothesis test analysis, which provide insight on the relevance of variable correlation. The findings show that all constructs have extremely high dependability, as seen by values that above the frequently recommended threshold of 0.70. In particular, Knowledge had a reliability score of 0.842 (M = 0.841, STDEV = 0.024, p < 0.001), suggesting that the measurement items used to gauge respondents' knowledge had a high degree of internal consistency. This shows that the indicators accurately reflect the underlying construct and provide consistent assessment throughout the sample. The Marketing construct has a reliability of 0.852 (M = 0.852, STDEV = 0.025, p < 0.001). This finding suggests that respondents perceived and assessed the marketing components in a very consistent way, as the items evaluating marketing-related perceptions show a high degree of

consistency. With a value of 0.828 (M = 0.828, STDEV = 0.028, p < 0.001), the construct Social Influence also showed good dependability. This shows that the measuring items for social pressure, peer influence, and normative expectations accurately represent the concept of social influence in the study environment. Purchase Intention had a particularly high dependability score of 0.959 (M = 0.959, STDEV = 0.007, p < 0.001). These results show that the indicators used to measure respondents' desire to buy are very strongly consistent with each other. A reliability value this high indicates that the items consistently reflect the behavioural intention construct and are highly connected. Similarly, the Religiosity construct demonstrated exceptional dependability with a reliability rating of 0.955 (M = 0.955, STDEV = 0.007, p < 0.001).

Knowledge and Purchase Intention

The results indicate that halal knowledge also has a significant positive effect on purchase intention. Consumers who possess greater knowledge about halal ingredients, certification processes, and halal standards are more likely to develop favourable attitudes toward halal cosmetic products. This finding supports previous research suggesting that knowledge plays a critical role in shaping consumer behaviour. Knowledge enables consumers to differentiate between halal and non-halal products, thereby reducing uncertainty in the decision-making process. In the context of cosmetic products, where ingredient transparency is increasingly important, consumers with higher levels of halal knowledge may be more confident in selecting products that comply with Islamic principles. However, it is important to note that while halal knowledge contributes to purchase intention, its effect is weaker than that of halal awareness. This suggests that knowledge alone may not be sufficient to drive purchasing behaviour unless it is accompanied by broader awareness and positive perceptions of halal products.

Religiosity and Purchase Intention

The findings also reveal that religiosity significantly influences purchase intention. Consumers with stronger religious commitment are more likely to prioritise halal compliance when purchasing cosmetic products. This result is consistent with the literature on halal consumption, which emphasises the role of religious beliefs in guiding consumer behaviour (Kaur et. Al, 2022; Wardana et. al, 2025). Religiosity influences not only the choice of products but also the degree to which consumers seek information about halal certification and ingredients. For Muslim consumers, purchasing halal products is not merely a matter of preference but also a reflection of religious obligation and personal identity. As such, individuals with higher levels of religiosity are more likely to demonstrate stronger purchase intentions toward halal cosmetic products.

Social Influence and Purchase Intention

The results indicate that social influence does not have a statistically significant effect on purchase intention. Although Generation Z consumers are often described as being heavily influenced by social media, peer recommendations, and digital communities, these factors do not appear to significantly affect halal cosmetic purchasing behaviour in this study (Suyono et. al, 2023). One possible explanation is that decisions related to halal products are more closely tied to personal values and religious considerations rather than external social pressures. While social media may influence general cosmetic preferences, the choice of halal

products may be guided primarily by internal motivations such as religious beliefs and personal awareness.

Marketing and Purchase Intention

The analysis indicates that purchase intention is significantly positively influenced by halal awareness. This study found that halal awareness is the most important factor that affects customers' plans to buy halal cosmetics. (Soliman et. Al, 2025) According to this research, customers are more likely to favour halal cosmetics if they are more knowledgeable about halal certification, ingredients, and halal-related issues.

This finding is consistent with earlier research that emphasises the relevance of consumer awareness in affecting halal consuming habits (Zulkifli & Abdul Rahaman, 2022). Customers are more likely to take these factors into account when making purchases when they are aware of the advantages and religious connotations of halal items. For Generation Z customers, who are heavily exposed to digital information sources and social media content, awareness campaigns and instructional activities may have a significant impact on their product purchases.

Conclusion

Overall, the results of this study highlight the importance of awareness, knowledge, and religiosity in shaping Generation Z consumers' intention to purchase halal cosmetic products. Among these factors, halal awareness emerges as the most influential determinant. This finding underscores the importance of increasing consumer awareness about halal certification, ingredients, and ethical production practices. The significant role of religiosity also suggests that religious values continue to influence consumer behaviour even among younger generations. Although Generation Z is often characterised as highly modern and digitally connected, religious beliefs remain an important factor in guiding consumption decisions in Muslim-majority societies. Furthermore, the results indicate that knowledge about halal products can enhance consumer confidence and encourage purchasing behaviour. Educational initiatives, transparent product labelling, and effective communication strategies may therefore help strengthen consumer trust in halal cosmetic products. From a practical perspective, these findings provide important insights for cosmetic manufacturers, marketers, and policymakers. Companies operating in the halal cosmetics industry should prioritise awareness campaigns and consumer education initiatives to increase understanding of halal certification and product ingredients. In addition, integrating halal values

into brand identity and marketing strategies may help strengthen consumer engagement with halal cosmetic products.

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References

1. Abdul Jabar, S., Samsudin, A., Mazan, D., & Roslan, S. (2024). Determinants of purchase intention for halal cosmetics among Generation Z consumers. *INSIGHT Journal*.
2. Abd Rahman, A., Asrarhaghghi, E., & Rahman, S. (2015). Consumers and halal cosmetic products: Knowledge, religiosity, attitude and intention. *Journal of Islamic Marketing*, 6(1), 148-163.
3. Abdullah, A., Rahman, A., & Azam, M. (2017). Halal cosmetics: The drivers of consumer acceptance. *Journal of Islamic Marketing*, 8(3), 436-451.
4. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
5. Ali, A., Xiaoling, G., Sherwani, M., & Ali, A. (2018). Factors affecting halal meat purchase intention: Evidence from international Muslim students in China. *British Food Journal*, 120(3), 527-541.
6. Ali, A., Ali, A., Xiaoling, G., Sherwani, M., & Hussain, S. (2017). Expanding the theory of planned behaviour to predict Chinese Muslims' halal meat purchase intention. *British Food Journal*, 119(3), 527-540.
7. Aziz, Y. A., & Chok, N. V. (2013). The role of halal awareness and halal certification in influencing non-Muslims' purchase intention. *Journal of International Food & Agribusiness Marketing*, 25(1), 1-23.
8. Bonne, K., & Verbeke, W. (2008). Religious values informing halal meat production and the control and delivery of halal credence quality. *Agriculture and Human Values*, 25(1), 35-47.
9. Djafarova, E., & Trofimenko, O. (2019). Exploring the relationships between self-presentation and self-esteem of young female Instagram users in the UK. *Computers in Human Behavior*, 99, 326-333.
10. El-Bassiouny, N. (2014). The one-billion-plus marginalization: Toward a scholarly understanding of Islamic consumers. *Journal of Business Research*, 67(2), 42-49.
11. Golnaz, R., Zainalabidin, M., Mad Nasir, S., & Eddie Chiew, F. C. (2010). Non-Muslims' awareness of halal principles and related food products in Malaysia. *International Food Research Journal*, 17(3), 667-674.
12. Hair, J., Hult, G., Ringle, C., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
13. Hair, J., Risher, J., Sarstedt, M., & Ringle, C. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
14. Hanzae, K., & Ramezani, M. (2011). Intention to halal products in the world markets. *Interdisciplinary Journal of Research in Business*, 1(5), 1-7.
15. Hassan, S., & Harun, H. (2016). Factors influencing fashion consciousness among Generation Y in Malaysia. *Procedia Economics and Finance*, 37, 180-186.
16. Haque, A., Sarwar, A., Yasmin, F., Tarofder, A., & Hossain, M. (2015). Non-Muslim consumers' perception toward purchasing halal food products in Malaysia. *Journal of Islamic Marketing*, 6(1), 133-147.
17. Hussain, I., Rahman, S., Zaheer, A., & Saleem, S. (2016). Integrating factors influencing consumers' halal products purchase: Application of theory of reasoned action. *Journal of International Food & Agribusiness Marketing*, 28(1), 35-58.
18. Ismail, S., & Nasiruddin, K. (2014). Halal products: Consumer perception and purchase intention. *International Journal of Business and Social Science*, 5(11), 112-120.
19. Jannah, S., & Indra, M. (2024). Factors influencing purchase intention of halal cosmetics among Generation Z consumers. *Asian Journal of Islamic Management*.
20. Kamaruddin, A., & Mokhlis, S. (2003). Consumer socialization and young consumers' purchase behaviour. *Journal of Consumer Marketing*, 20(2), 111-125.
21. Kotler, P., & Keller, K. (2016). *Marketing management (15th ed.)*. Pearson.

22. Mukhtar, A., & Butt, M. (2012). Intention to choose halal products: The role of religiosity. *Journal of Islamic Marketing*, 3(2), 108–120.
23. Norazah, M. S. (2020). Halal cosmetic adoption among young consumers. *Journal of Islamic Marketing*, 11(6), 1421–1438.
24. Priporas, C., Stylos, N., & Fotiadis, A. (2017). Generation Z consumers' expectations of interactions in smart retailing. *Computers in Human Behavior*, 77, 374–381.
25. Rahman, A., Asrarhaghighi, E., & Rahman, S. (2015). Consumers' perception and purchase intention toward halal cosmetics. *Journal of Islamic Marketing*, 6(1), 148–163.
26. Ringle, C., Wende, S., & Becker, J. (2015). *SmartPLS 3*. SmartPLS GmbH.
27. Ristiyana, D., Huda, N., & Nugroho, A. (2024). Determinants of halal cosmetic purchase intention among young Muslim consumers. *International Journal of Islamic Business*.
28. Rachmawati, D., & Rahayu, S. (2022). Consumer awareness of halal cosmetic products in Indonesia. *Journal of Islamic Marketing*.
29. Ramadhany, S. (2024). Halal knowledge and religiosity as predictors of halal cosmetic purchase behaviour. *Asian Journal of Islamic Management*.
30. Riswandi, W., Sudarsono, H., Rahmi, A., & Hamza, A. (2023). Religiosity and knowledge influencing halal cosmetics purchase intention. *Journal of Islamic Marketing*.
31. Sudarsono, H., Rahmi, A., & Hamza, A. (2024). Muslim Generation Z purchase intention toward halal cosmetics in Indonesia. *Journal of Islamic Marketing*.
32. Suki, N. (2016). Green product purchase intention: Impact of green brands, attitude, and knowledge. *British Food Journal*, 118(12), 2893–2910.
33. Mohamed Soliman, Mahmood Hayeemad, Ruslee Nuh, Chutikan Phetkaew, Investigating factors affecting purchase intention of halal cosmetics products among Millennial consumers: findings from PLS-SEM approach, *Journal of Islamic Marketing*, Volume 17, Issue 4,
34. Teng, P., & Wang, S. (2015). Drivers of halal food purchase intention. *British Food Journal*, 117(8), 1977–1994.
35. Thomson Reuters. (2018). State of the global Islamic economy report.
36. Wardana C. K, Abas N.I, Azizah L.O.F, Puspawati D,. (2025). Does Religiosity Matter? A Comparative Study of Online Purchase Intention of Sharia Fashion Products Among Muslim Women. *Pertanika Journal of Social Sciences and Humanities* 33(2)
37. Wilson, J. (2012). The halal phenomenon: An extension or a new paradigm? *Social Business*, 2(3), 255–271.
38. Wilson, J., & Liu, J. (2010). Shaping the halal into a brand. *Journal of Islamic Marketing*, 1(2), 107–123.
39. Yakin, N., Saad, M., & Maulani, M. (2023). Purchase intention behaviour of halal cosmetics: A comparative study between Indonesia and Malaysia millennials. *Journal of Islamic Marketing*.
40. Yusof, Y., Jusoh, W., & Zakaria, Z. (2020). The role of halal certification in consumer trust. *Journal of Islamic Marketing*.
41. Zailani, S., Omar, A., & Kopong, S. (2011). An exploratory study on halal awareness among consumers in Malaysia. *International Journal of Business and Management*.
42. Zhang, Y., Jing, L., Bai, Q., Shao, W., Feng, Y., Yin, S., & Zhang, M. (2018). Application of an integrated framework to examine Chinese consumers' purchase intention toward genetically modified food. *Food Quality and Preference*, 67, 118–128.
43. Zulkifli, N., & Abdul Rahman, A. (2022). Halal lifestyle adoption among Muslim youth consumers. *Journal of Islamic Marketing*.