

Consumer Emotions and Behaviors: Double Moderation of Sign Value and Source Market

Abstract

Purpose – The contribution of this study is two-fold. First, we draw on attribution theory to develop a model for predicting how the knowledge, emotions, and satisfaction that consumers have regarding halal cosmetics can influence their willingness to pay more and recommend the products to others.

Design/methodology/approach – Survey data from 278 Indonesian and 163 Malaysian female consumers were analyzed by means of structural equation modelling. Second, we test the moderation role of sign value using metric invariance across the two different source markets.

Findings – The results obtained confirm that consumers exhibit positive emotions when they possess knowledge about halal cosmetics and their quality. Testing the double moderation further reveals that consumers with a high sign value behave differently from those with a low sign value.

Originality/value – These findings present practical insights that can be used by retailers and marketers in their strategies to boost the sale of halal cosmetics.

Keywords: *Cultural marketing; sign value; halal cosmetics; willingness to pay more; satisfaction; emotion.*

1. Introduction

The global cosmetics market has grown exceptionally in the past two decades. This has pushed business investors, government agencies, and cosmetics firms to synergically penetrate emerging markets—such as the halal cosmetics market (i.e., Muslim consumer)—with innovative branding and products (Abd Rahman *et al.*, 2015; Ray, 2017). Several firms and companies have recognized the market share and volume of halal cosmetics. However, the complex attitudes and intentions of halal cosmetic consumers has largely been unexplored in existing literature (Dalir *et al.*, 2020; Olya and Al-Ansi, 2018).

Brand awareness, quality, and a knowledge of market needs are crucial when forming a product's identity, which, in turn, drives the firms' performance and profits (Homburg *et al.*,

2010; Kim *et al.*, 2015). According to Wiedmann *et al.* (2009), perceived value (i.e., functional value, individual value, and social value) is a vital component of consumption behavior/experience. This means that a consumers' intention to purchase a product is relatively influenced by how they perceive its quality (Cilingir and Basfirinci, 2014). Jamal and Sharifuddin (2015) explored this concept in the context of halal labelling and branding. However, there is a great need to further expand perceived value, particularly in light of the rapidly changing business environment and booming demand for halal and vegan cosmetics.

The consumption of cosmetics depends heavily on a consumer's thoughts, preferences, appearances, and grooming choices (Shah *et al.*, 2023). These personal characteristics generally stem from an individual's culture, society, and psychology, particularly in the case of female consumers (Briliana and Mursito, 2017, Lee *et al.*, 2019). Halal is a cultural value stemming from an Islamic law called Sharia, which applies to all aspects of life including cosmetic consumption. Globally, the culture-oriented product market of halal is immensely promising due to the rapidly growing Muslim population (Wilson and Liu, 2010; Al-Ansi *et al.*, 2022). It is estimated that the halal cosmetics market worth USD 55 million 2022 (Ray, 2017). This is particularly evident in Southeast Asia, where countries such as Indonesia and Malaysia have become the biggest markets for halal cosmetics due to their rapid economic growth over the last few years [See Appendix B]. Several governmental policies have encouraged local brands and the importance of safety and quality in the cosmetics industry. This has further boosted the consumption of halal cosmetics, as evidenced in the Global Islamic Economy Report-GIER (2018).

Despite this growth, there is little research on the consumers of halal cosmetics, and their perceptions, attitudes, and behaviors. There have been numerous studies on Islamic/halal marketing, but these have insights into very specific areas (e.g., halal logistics, strategies, consumer behavior) and do not relate to cosmetics and skin care (Wilson and Liu, 2010; Aoun and Tournois, 2015; Olya and Al-Ansi, 2018; Dalir *et al.*, 2020). Furthermore, the link between halal cosmetic consumption and the increasing number of Hijab wearing fashion bloggers and social media influencers is under-studied. This social media movement seems to present an image of a Muslim female identity, beauty, and cosmetics that goes well beyond the traditional ideologies portrayed in mainstream media (Pemberton and Takhar, 2021).

Arguably, cosmetics are a means of expression. They are used by women to reflect their personality and are an essential part of their daily lives. According to Schmitt (2012), the interplay of brand symbolism and attachment can be used to predict consumer behaviors. Such

perceptions are derived significantly from religious identity. Wilson and Liu (2010) presented key factors of Islamic self-identity and halal market knowledge that shape the consumer behavior and intentions of Muslims. Most notably, they explain that the invisible elements of an individual's personality can be investigated using their sign value. Nguyen *et al.* (2019) summarized the intrinsic and extrinsic motivations of individual in various contexts. Generally, an individual's appearance represents their lifestyle which, in turn, reflects their social and economic prestige. Lin *et al.* (2015) explained the theory of sign value as follows:

“According to the theory of sign value, consumers’ needs are considered cultural constructions. Therefore, the signified value is seen as the social status enjoyed when people consume a particular product [...] By consuming certain signs, consumers can sense and enjoy a certain social status, while simultaneously developing new sign value (Lin et al., 2015, 149).”

Sign value has a significant psychological impact the decision to purchase, use, or consume a product (Laurent and Kapferer, 1985). While the relevance of this to marketing has been discussed, there is still a lack of research on the link between sign value and consumer perceptions, attitudes, and behaviors (Dimanche and Samdahl, 1994; Cho and Kerstetter, 2004). Furthermore, former literature on halal products has largely omitted the female cosmetic industry. Al-Ansi, Olya, and Han (2019) distinguished the behavior of male and female consumers in the halal food industry and reveal the need to further analyze different demographic segments in other halal markets. To address the aforementioned research gaps, this study observes the psychological mechanisms that affect female halal cosmetic consumption through an in-depth empirical analysis of the functional outcome of their emotions and perspectives on product choice.

To this end, we develop and test a new model based on attributions theory. We aim to use this model to (a) predict the emotions, satisfaction, and behavior of female consumers of halal cosmetics, and (b) identify the effects of various antecedents, such as: consumers’ knowledge about halal cosmetics, their expectations from such cosmetics, and their perceived quality, emotion, satisfaction, willingness to pay more (WTPM), and word of mouth (WoM). Data from two countries (Indonesia and Malaysia) is used to empirically test the effects of double moderators and sign value on different source markets using our model. This contributes to theory on the influence of individual (sign value) and environmental (source market) factors and is of practical relevance to businesses who wish to predict the behavior of halal cosmetics consumers.

2. Theoretical framework and hypotheses

2.1 Attribution theory

In the current marketplace, which is highly dynamic, retailers and marketers are encouraged to adopt an “outside-in” approach to assessing consumers perceptions and attitudes towards a product. Attribution theory is one such approach (Schmitt, 2012; Gerrath and Usrey, 2021). Kelley and Michela (1980) defined attribution theory as the study of causation, whereby a combination of antecedents (such as information, motivations, and beliefs) can potentially be used to predict a person’s behavior. These antecedents can be classified into internal and external attributes and create a framework for determining how information or experience produces certain results (Malär *et al.*, 2011; Schmitt, 2012). Fiske and Taylor (1991) used attribution theory to determine how individuals form personal judgments based on the information they gather about a product or service.

Generally, attribution theory is a mechanism for taking into account multiple subjective dimensions from a psychological perspective (Kelley and Michela, 1980; Klein and Dawar, 2004). Several studies have empirically shown the importance of causal attributions in conceptual models that explain consumer behavior (Klein and Dawar, 2004; Malär *et al.*, 2011; Schmitt, 2012; Gerrath and Usrey, 2021). For example, Klein and Dawar (2004) evaluated the mediating role of attributes in accurately predicting product brand assessment and buying intention. Malär *et al.* (2011) found that positive and negative attributions affect the intrinsic response of individuals. These studies show that if we are to decode consumer responses in the halal cosmetics market, it is imperative to analyze consumer beliefs and the information they acquire. However, the extant literature is limited. Butt *et al.* (2020) presented several bases to assess the role of attribution in shaping consumer responses in the halal products market. In addition, Dalir *et al.* (2020) addressed how multiple attributes can contribute towards sufficient knowledge of the halal cosmetics industry. More testing of such associations and an expansion of the scope of attribution theory to address the marketing of halal products will greatly further this research strand.

2.2 Willingness to pay more (WTPM) and word of mouth (WoM)

This study models WTPM and WoM as two salient behavioral responses of consumers. WTPM is the maximum amount of money a consumer is willing pay for a given product (Anselmsson *et al.*, 2014; Homburg *et al.*, 2005). Notably, purchasing halal items are compulsory according to Islamic teaching and Muslim consumers are obliged to search for them no matter the sacrifice. [In their systematic review, Nordin et al. \(2021\) unpacked the consumer decision](#)

process leading to purchase behavior of halal skin care products. WoM is the unofficial information about a product or service that is passed from one individual to another (Berger, 2014). It is an effective measurement of people's intentions of using a product or experiencing a service when they indulge in verbal interactions or storytelling. Harrison-Walker (2001) explained how consumers' future behavioral intentions can be determined from the quality of service they experience. Nikhashemi *et al.* (2019) highlighted how consumers behavioral responses, such as the WTPM and WoM, will differ due to different psychological characteristics (e.g., expectation). Similarly, Pan *et al.* (2012) explained how understanding the processes that shape a consumer's attitude and behavior is important for businesses and marketing strategies. Furthermore, Perugini and Bagozzi (2004) articulate the difference between consumer intentions (which are transformed into actions) and desires (which are merely personal thoughts). Muslim consumer intentions are explained as a critical dimension in different aspects of the business. Jeaheng *et al.* (2020) assessed how the behaviors and intentions of Muslims towards halal products in Thailand are formed. Similarly, Han *et al.* (2019) confirmed the effectiveness of halal product/service performance in attracting Muslim consumers in Korea. In the cosmetics market, health and environmental concerns are sensitive matters which form consumer behaviors (Sadiq *et al.*, 2021). Handriana *et al.* (2021) affirmed the formation of behaviors and intentions of Muslim female consumer's towards halal cosmetics. Consumers' behavioral intentions are treated as salient concepts in various managerial and theoretical fields. Moreover, they have been studied as exclusive aspects in the marketing of halal products (Aoun and Tournois, 2015; Briliana and Mursito 2017).

2.3 Product knowledge, expectations, and perceived quality

A consumer's experience and knowledge of a product are some of the factors that influence their behavior (Park and Moon, 2003; Cilingir and Basfirinci, 2014). Knowledge can be both subjective and objective and contributes towards the overall understanding of a product. In their investigations, Lee and Lee (2011) discussed the differences of high and low product knowledge on competition and consumer product evaluation. Highly knowledgeable consumers tend to have a more comprehensive approach and selective attitude toward purchasing a product. Existing literature highlights the critical role of product knowledge in forming an individual's cognitive and affective perceptions. Wang and Hazen (2016) investigated how variant consumer responses stem from product quality knowledge, which generates either positive and/or negative perceptions. Goh and Balaji (2016) emphasized how consumers are concerned with the social impact of commodities and their contents. Cilingir

and Basfirinci (2014) investigated the moderating role of product knowledge on the association between country-of-origin and product assessment. They tested consumer responses to two cues, “Made in Japan” and “Made in Turkey.” Notably, the knowledge of product specifications and ingredients is the first step to examine a Muslim consumer’s intention. Abd Rahman *et al.* (2015) reports how this initial step will influence the consumer to either purchase halal cosmetics or not. Awareness and knowledge related to religiosity (e.g., halal logo, ingredients), and product attributes (e.g., price, quality) are considered as critical matters for Muslim consumers (Isa *et al.*, 2023). Yet like other cultural consumption, purchasing halal cosmetics involves cognitive and affective process. Nonetheless, further studies are needed to identify attributes that evoke emotion and stimulate behaviors of halal cosmetic consumers.

Consumers’ product expectations are influenced by how they perceive it and the information they receive about it before, during, or after consumption (i.e., information on product availability, quality, and offers) (Parasuraman *et al.*, 1991). Previous studies have evaluated how expectations would lead to affect a consumers’ satisfaction and emotions (Antony *et al.*, 2018; Hsieh and Yuan, 2021). Kosiba *et al.* (2020) argued that a combination of factors (related to the market/product) form a consumer expectation, and this expectation will increase or decrease after the consumption or use of a product, altering his/her future purchase behavior (Goh and Balaji, 2016; Hsieh and Yuan, 2021). Notably, consumer expectations of a halal cosmetic item would be affected by legality (i.e., information, contents, design, etc.,) and this is an important issue to evaluate. Aoun and Tournois (2015) discussed how consumers evaluate brand value after their interaction with halal products and compare their experience with their expectation. This perception has been used in the context of other halal industry (e.g., hospitality and service) (Al-Ansi *et al.*, 2021).

Perceived quality refers to a consumers’ perception of the overall performance of the product, including its content, marketing, accessibility, and price (Netemeyer *et al.*, 2004). Generally, consumers purchase products that fulfil their wants and needs, stimulating positive emotions and behavioral intentions. Undoubtedly, a consumer’s demographic, preferential, cultural, religious, and social attributes act as crucial antecedents in their satisfaction. Wang and Hazen (2016) elucidate on the relationship between perceived quality and consumer loyalty. Expanding upon this relationship, Frank *et al.* (2014) empirically identified the serial effect of perceived quality (including: product experience, product beliefs, evaluative judgments, and behavioral intentions) on consumer loyalty based on the data of three countries (Bolivia, Japan, and the US). Notwithstanding, very few studies have analyzed the decision-

making process of female consumers' when purchasing halal cosmetics (Abd Rahman *et al.*, 2015; Briliana and Mursito, 2017; Dalir *et al.*, 2020). There is a high demand to gain a deeper understanding of halal cosmetics to address the stiff competition in the global market (The Korea Times, 2019). Further, Handriana *et al.* (2021) reported perceived value, brand image, and halal certification as general indicators of halal cosmetics performance. However, assessing the quality and information of halal products is challenging, particularly if these attributes were not well-communicated or well-perceived. Therefore, this study investigates the role of product knowledge, consumer expectations, and product quality on female consumers' emotions, satisfaction, and behavioral intention concerning halal cosmetics.

Several studies have asserted that product knowledge, consumer expectations, and perceived quality trigger consumers' attitude and behavior (Fornell *et al.*, 1996; Cilingir and Basfirinci, 2014; Frank *et al.*, 2014). For instance, Fornell *et al.* (1996) contended that consumers are satisfied when they perceive that the product's quality is at par with their expectation. Similarly, Frank *et al.* (2014) emphasized the positive associations between consumer expectations, perceived quality, emotions (positive/negative), and satisfaction. Lee and Lee (2011) showed how product knowledge (or product information) impacts consumers' perceptions and emotions. Additionally, Park and Moon (2003) and Cilingir and Basfirinci (2014) showed that product knowledge exerts a greater impact on consumers' purchase decisions in the case of utilitarian products. Considering the literature on halal products, Al-Ansi *et al.* (2021) illustrated the significantly positive effect of halal products on Muslim consumers' emotions and satisfaction. They determine that Muslim consumers' perceptions and emotions toward halal items vary based on the origin of the product. In this regard, this study proposes the following hypotheses:

H1: Knowledge about halal cosmetics influences (a) consumer emotion and (b) consumer satisfaction.

H2: Consumers' expectations regarding halal cosmetics stimulate (a) consumer emotion and (b) consumer satisfaction.

H3: Perceived quality of halal cosmetics increases (a) consumer emotion and (b) consumer satisfaction.

2.4 Consumer emotions and satisfaction

Emotions are the overall response or reaction toward a given object. Oliver (2014) highlighted the critical role of positive and negative emotions in influencing consumers' evaluations and

purchase decision processes. Generally, the performance and quality of a product elicits emotions in consumers. Khalid and Helander (2006) proposed a framework to evaluate consumers' emotional responses toward product design, which incorporated their expressions and feelings. They assert that consumers' emotions, consciously or unconsciously, stimulate their decision to purchase or use a product. Rychalski and Hudson (2017) showed the influence of positive and negative emotions on consumers' attitude and behavior. Kim *et al.* (2016) examined consumer emotions before and after the experience of shopping for luxury products. They find that consumers experience different emotions, which impact their product evaluations and purchase intention. However, the complexity of emotional responses in sensitive cultural or religious contexts has not been fully captured. For instance, Olya and Al-Ansi (2018) studied the impact of negative perceptions (e.g., the risks of halal products) on Muslim consumers' behaviors. They argued that compliance with halal law can mitigate such negative impacts on consumption behaviors.

Another salient element that is highly valued by marketers and managers is consumer satisfaction. It represents the extent to which an individual approves of an experience, product, or service (Oliver, 2014). It generally refers to how consumers perceive a product's quality and value after consumption. Kumar *et al.* (2013) reviewed the extant literature capturing the role of consumer satisfaction in businesses, showing how firms focus on boosting consumer satisfaction to retain or improve their position in the market. Grewal *et al.* (2010) presented insights on satisfaction to help businesses boost sales through changing consumer attitude and behavior over time. Cosmetic firms form extensive marketing plans to increase consumer satisfaction (Dalir *et al.*, 2020). However, the antecedents and outcomes that show the level of consumer satisfaction when consuming halal cosmetic remain unexplored.

Several studies show that emotions and satisfaction can effectively predict consumers' future intentions. Frank *et al.* (2014) emphasized the role of affective and cognitive satisfaction in forming consumer intention and loyalty. Their results are based on data from various groups of consumers, including Asians and Americans. Olsen (2002) found that consumer satisfaction is a mediating link between product performance, quality, and repurchase behavior. Furthermore, Homburg *et al.* (2005) reveals the strong positive impact of satisfaction on the willingness to purchase. That is, consumers are willing to spend more money to obtain satisfactory products or services. Notable relationships between satisfaction, emotions, and future behavioral intentions have been highlighted in various contexts (Rychalski and Hudson, 2017). Particularly, Briliana and Mursito (2017) demonstrated how the purchase intentions of

Indonesian Muslim youth are directly influenced by their satisfaction levels in the context of halal cosmetics. They emphasize how the principle of halal raises a consumer's consciousness when consuming cosmetic products. Similar studies have tested the purchase intentions of consumers in halal markets for Muslim and non-Muslim groups (Al-Ansi *et al.*, 2019; Nugraha *et al.*, 2022) Therefore, the following hypotheses are established:

H4: Emotions enhance (a) WTPM and (b) WoM.

H5: Satisfaction boosts (a) WTPM and (b) WoM.

2.5 Moderation role of sign value

Sign value can be defined as a product's ability to express a consumer's identity and personality, providing them with status among other consumers (Laurent and Kapferer; 1985). It is an essentially a psychological phenomenon—or internal motivator—that influences consumer's purchases and can therefore be measured psychometrically during social interactions and connecting with others (Dimanche and Samdahl, 1994; Cho and Kerstetter, 2004). This study adopts the view that sign value is a vital consumer attribute, indicating the symbolic nature of their purchases.

Implicitly, the consumption of halal cosmetics varies based on environmental differences in markets, and many international firms intend to cater to such diverse markets (Dalir *et al.*, 2020). Abd Rahman *et al.* (2015) stressed that Islamic beliefs are a vital aspect in predicting Malaysian consumers' intention to consume halal cosmetic products. Similarly, Briliana and Mursito (2017) showed that the attitude toward halal cosmetics is a focal element in Indonesia influencing consumers' behavior and intention to purchase them. Olya and Al-Ansi (2018) confirmed that religious or cultural forces significantly influence heterogeneous decision-making processes. Therefore, the role of environmental factors (or the source market) is vital in predicting consumers' behavioral responses toward halal cosmetics. [Muslim female particularly millennial female consumers are likely concern about beauty and halal ingredients \(Handriana *et al.*, 2021\).](#)

Recently, Kumar *et al.* (2021) justified the moderating role of cultural factors (e.g., femininity, gender, individualism, collectivism) in optimizing conspicuous consumption behavior. The cosmetic products market entails beauty, attractiveness, and body care, which are essential elements reflecting individual personality, appearance, and lifestyle. Thus, one can say that the relationship between an individual's identity and purchase activity is significantly connected with the sign value. Bolin (2005) examined the role of symbolic

consumption in explaining an individual's new self-concept. However, this concept is fairly nascent and must be tested empirically in different contexts. In other words, the sign value varies among consumer profiles based on several factors, such as their cultural backgrounds. Dalir *et al.* (2020) discussed the differences among various halal cosmetic markets owing to their environmental factors. There is, however, a scarcity of empirical studies that establish the association between sign value and consumer emotions, perceptions and satisfaction in cosmetics market context. Muslim perceptions and decision are fed by religious principles (i.e., Islamic law: halal). Accordingly, this interaction might be interpreted as a significant sign that explains the process phenomena of Muslim consumer perceptions. Handriana *et al.* (2021) and Al-Ansi *et al.* (2021) observed that social, physical atmosphere, and dress code are important elements for Muslim well-being. We surmised that an interaction of sign value with the source market can serve a double moderating role in the behavior of cosmetic consumers and constructed the following hypotheses:

H6: The sign value of Indonesian and Malaysian female consumers moderates the relationship between their knowledge about halal cosmetics and (a) emotions and (b) satisfaction.

H6: The sign value of Indonesian and Malaysian female consumers moderates the relationship between their expectations and (c) emotions and (d) satisfaction.

H6: The sign value of Indonesian and Malaysian female consumers moderates the relationship between the perceived quality and their (e) emotions and (f) satisfaction.

H6: The sign value of Indonesian and Malaysian female consumers moderates the relationship between their emotions and (g) WTPM and (h) WoM.

H6: The sign value of Indonesian and Malaysian female consumers moderates the relationship between their satisfaction and (i) WTPM and (j) WoM.

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3. Methodology

3.1 Data collection and demographics

Data were obtained from Indonesia and Malaysia as representative of a rapidly developing halal cosmetic markets in Southeast Asia (GIER, 2018). Through convenience sampling in 2019, a field survey was conducted in several relevant locations in Malaysia, such as shopping centers and international halal exhibitions. For Indonesia, the survey was conducted online in 2020 using a reliable distributor company. Participants from different cities, were approached to take into consideration the size of the country. *Despite different approach of data collection (Malaysia: offline and Indonesia: online), the study attempted to collect data from multi-sources to capture the geographic and cultural variations across two countries which may produce a more comprehensive view from Southeast Asian markets.* To ensure that only relevant consumers participated, the questionnaire contained screening questions regarding familiarity with and consumption of halal cosmetics and only female consumers were targeted (Aoun and Tournois, 2015). *A small gift was also presented to each completed questionnaire form, this practice helped to increase the participants intentions in carefully response to each question.* Out of 583 distributed surveys, 472 responses were returned and after removing invalid or incomplete survey forms, data from 441 cases (response rate: 76%) remained to conduct statistical analyzes. 441 participants (278 Indonesian and 163 Malaysian) completed the survey.

<Insert Table 1 here>

Table 1 reports the participants' demographics. In the Indonesian group, the majority of participants were between the ages of 18 and 37 (78.1%), while the rest were either 38 years old or older. Furthermore, most participants (75.2%) earned an income less than USD \$14,999, while 16.9% earned between USD \$15,000 and USD \$24,999 and 7.9% earned more than USD \$25,000. Educational demographics show that participants mostly held a university or college degree (45.3%). The second-highest number of participants held a master's degree (39.2%), and the least (4.7%) earned a Ph.D. degree. Lastly, 51.1% of the participants were either single or divorced, and a close 48.9% were either married or in a relationship.

In the Malaysian group, most respondents (61.9%) were 18–37 years, while the rest were aged 38 or more. Most of the respondents (34.5%) earned less than USD \$14,999, followed by those earning more than USD \$45,000 (29.4%). Respondents' educational statistics report that most (29.4%) hold a Ph.D. degree, followed by those who possess a university or college degree (27.6%). The least number of respondents (17.8%) hold a master's degree. Finally,

respondents were mostly married or in a relationship (69.3%), and the rest were either single or divorced.

3.2 Measurements development and analysis

The survey was divided into three stages. A brief introduction was provided to participants, in which they were told about the study's scope. Then, they were asked questions regarding their demographics and the study's eight main constructs. The first three constructs—knowledge about halal cosmetics, consumer expectations, and perceived quality—were sourced from Fornell *et al.* (1996). The fourth and fifth constructs, emotion, and satisfaction, were adopted from Cooper *et al.* (1995) and Fornell *et al.* (1996). The sixth and seventh ones, willingness to pay more and word of mouth, were extracted from Briliana and Mursito (2017) and Kang *et al.* (2012), respectively. Finally, sign value was measured using two questions from Laurent and Kapferer (1985). A 7-point Likert scale was used, the questionnaire was constructed in English and later translated into Bahasa Indonesia and Bahasa Melayu languages using a back-translation approach. Three members of prominent academic institutions in Indonesia and Malaysia aided in framing and translating it. A pilot test was conducted to verify its readability and clarity. The authors used the two-step approach recommended in Anderson and Gerbing (1988) to test the reliability and validity of the questionnaire items and the software IBM-SPSS 22.0 and AMOS 24.0 for data analysis.

4. Results

4.1 Measurement model assessment

A confirmatory factor analysis (CFA) was conducted to test the psychometric properties of the measurements. CFA not only helps confirm the scale composition of the items, but also tests the measures for validity of both constructs and model fit. The Composite Reliability (CR) was estimated to check the reliability and internal consistency of the constructs. The results reported strong values ranging from .781 to .920, exceeding the benchmark of .70. Construct validity includes convergent and discriminant validity of the measures. In terms of convergent validity, a minimum of 0.5 is commonly accepted value for the Average Variance Extracted (AVE), and values of AVE for constructs of the present study ranged between .641 and .840 (Hair et al., 2014). As shown in Table [Appendix A], there was evidence of discriminant validity as the square root of the AVE for all constructs that were more than the absolute value of the correlation values (Hair et al., 2014). All values of the correlations were fully supported. The goodness of fit indices were $\chi^2 = 420.471$, $df = 202$, $p < .000$, $\chi^2/df = 2.082$, RMSEA = .050,

comparative fit index (CFI) = .969, Incremental Fit Index (IFI) = .969, and Tucker-Lewis index (TLI) = .961. These results satisfy the recommended levels of fit validity statistics, $\chi^2/df=2-5$, $RMSEA \leq .050$, $CFI \geq .095$, IFI and TLI $\geq .90$. The loadings of each item were calculated, and all of them were above the acceptable cut-off value of .06, as shown in Table 2.

<Insert Table 2 here>

4.2 Structural model assessment

Structural equation modelling (SEM) using a maximum likelihood (ML) estimation technique was applied to test the proposed hypotheses and the results are presented in Table 3. According to SEM results, positive and significant relationships were found in three paths ($\beta_{\text{Knowledge about halal cosmetics} \rightarrow \text{emotion}} = .106$, $t = 1.992$, $p < .05$; $\beta_{\text{Perceived quality} \rightarrow \text{emotion}} = .270$, $t = 2.660$, $p < .01$; $\beta_{\text{Perceived quality} \rightarrow \text{satisfaction}} = .729$, $t = 2.258$, $p < .01$). Thus, Hypotheses 1a, 3a, and 3b were supported. Contrastingly, Hypotheses 1b, 2a, and 2b reported insignificant relationships ($\beta_{\text{Knowledge about halal cosmetics} \rightarrow \text{satisfaction}} = .040$, $t = 1.130$, $p > .05$; $\beta_{\text{Consumer expectations} \rightarrow \text{emotion}} = -.043$, $t = -.414$, $p > .05$; $\beta_{\text{Consumer expectations} \rightarrow \text{satisfaction}} = .132$, $t = 1.847$, $p > .05$). Thus, these paths were not supported. Next, H4a, H4b, H5a, and H5b were supported because $\beta_{\text{Emotion} \rightarrow \text{WTPM}} = .334$, $t = 6.518$, $p < .01$; $\beta_{\text{Emotion} \rightarrow \text{WoM}} = .467$, $t = 9.154$, $p < .01$; $\beta_{\text{Satisfaction} \rightarrow \text{WTPM}} = .241$, $t = 4.789$, $p < .01$; $\beta_{\text{Satisfaction} \rightarrow \text{WoM}} = .201$, $t = 4.307$, $p < .01$ (Table 3).

A bootstrapping analytical technique was performed to test the indirect effect of antecedents in the structural model. As presented in Table 3, two antecedents were found to have a significant indirect impact on WTPM ($\beta_{\text{Knowledge about halal cosmetics} \rightarrow \text{WTPM}} = .045$, $p < .05$; $\beta_{\text{Perceived quality} \rightarrow \text{WTPM}} = .266$, $p < .01$). The WoM experienced a significant indirect impact from the same two antecedents ($\beta_{\text{Knowledge about halal cosmetics} \rightarrow \text{WoM}} = .057$, $p < .05$; $\beta_{\text{Perceived quality} \rightarrow \text{WoM}} = .273$, $p < .01$). Conversely, the antecedent Consumer expectations had an insignificant indirect effect on both WTPM and WoM ($\beta_{\text{Consumer expectations} \rightarrow \text{WTPM}} = .017$, $p > .05$; $\beta_{\text{Consumer expectations} \rightarrow \text{WoM}} = .006$, $p > .05$). The constructs jointly explained about 20.6% and 30.1% of the variance in the WTPM and WoM, respectively. As shown in Table 3, the goodness-of-fit indicated that the data fits sufficiently ($\chi^2 = 422.856$, $df = 176$, $p < .000$, $\chi^2/df = 2.403$, $RMSEA = .056$, $CFI = .963$, $IFI = .963$, $TLI = .956$).

<Insert Table 3 here>

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4.3 Metric invariance model assessment

A test for metric invariance was used to assess the double moderating effect of sign value, following the suggestion by Yoo (2002). The 441 samples were divided based on the nationality of the respondent (Indonesian female consumers = 278, Malaysian female consumers = 163). Notably, both sample sizes were acceptable for a multi-group analysis. Initially, a baseline model was performed, in which the loadings of all constructs were restricted to be equal, and all path relationships were freely examined. The goodness-of-fit indices for this baseline model were $\chi^2 = 911.437$, $df = 512$, $\chi^2/df = 1.780$, $p < .000$, RMSEA = .042, CFI = .947, IFI = .948, TLI = .933, indicating that the data fits adequately. The findings of the baseline model were sequentially compared to those of the nested model to test the potential moderating impact of sign value, as presented in Table 4.

A chi-squared test was performed to justify the model difference (Table 4). Interestingly, the path linkages from Knowledge of halal cosmetics to Emotion ($\Delta\chi^2 [1] = .515$, $p > .05$), Consumer expectations to Emotion ($\Delta\chi^2 [1] = 4.78$, $p < .05$), Consumer expectations to Satisfaction ($\Delta\chi^2 [1] = 1.25$, $p > .05$), Perceived quality to Emotion ($\Delta\chi^2 [1] = 2.84$, $p < .05$), Perceived quality to Satisfaction ($\Delta\chi^2 [1] = 4.82$, $p < .05$), Emotion to WTPM ($\Delta\chi^2 [1] = .825$, $p > .05$), and Satisfaction to WTPM ($\Delta\chi^2 [1] = 11.87$, $p < .01$) were significantly different across the study groups. Accordingly, H6_a, H6_c, H6_d, H6_e, H6_f, H6_g, and H6_i were supported (Table 4). These findings indicate that Indonesian consumers seem to have a higher emotional response than Malaysian consumers when they receive knowledge about halal cosmetics, increasing their willingness to spend more on such products. Interestingly, Malaysian consumers' responses toward halal cosmetics are stronger than Indonesian consumers when they perceive product quality as ideal, thereby stimulating their emotions and satisfaction and eventually increasing their willingness to pay more for such products.

Conversely, the path linkages from Knowledge of halal cosmetics to Satisfaction ($\Delta\chi^2 [1] = 1.94$, $p > .05$), Emotion to WoM ($\Delta\chi^2 [1] = 1.50$, $p > .05$), and Satisfaction to WoM ($\Delta\chi^2 [1] = 3.50$, $p > .05$) were not significantly different between the two groups. Therefore, H6_b, H6_h, and H6_j were not supported (Table 4). This finding suggests that the relationship of emotion and satisfaction with WoM was not significantly different among the Indonesian and Malaysian groups.

<Insert Table 4 here>

5. Discussions

As illustrated in [Figure 1](#), knowledge of halal cosmetics seems to have a significant impact on the respondents' emotions. Surprisingly, we found that such knowledge does not have a significant impact on their satisfaction in contrast to the findings in previous literature. Another unexpected finding is that consumers' emotions and satisfaction toward a product are not directly influenced by their expectations. These results could be owing to product type (that is, halal cosmetics) and the environment of the market (religion-based society). It means that consumers' knowledge about such products and their expectations do not influence their satisfaction because consuming halal products is prescribed and choices might be restricted due to religious beliefs and governmental policies (Jamal and Sharifuddin, 2015; Abd Rahman, 2015). Particularly, the Indonesian government announced that cosmetics products should be halal, that is, they should comply with the Islamic law (International Trade Administration, 2021). This suggests that contextual factors, such as regulations and norms, can render decision-making complex for cosmetic consumers. The existing literature acknowledges the heterogeneous role of antecedents on consumer behaviors (Antony et al., 2018; Dalir et al., 2020; Hsieh and Yuan, 2021; Minkov and Kaasa, 2022). Scholars have argued that consumer knowledge and expectation show vital interactions (positive and negative) towards emotions and satisfaction, which might rely on certain contextual factors (i.e., social norms and cultural value). For example, Wilson, and Liu (2010) emphasized the role of halal labels in enhancing consumers' response and emotions. Al-Ansi *et al.* (2021) found that such products and services are significantly associated with satisfaction in the hospitality and service industries. Conversely, Abd Rahman *et al.* (2015) found that religious beliefs, more than knowledge, was influential in Malaysian consumers' attitude.

This study found that the perceived quality significantly drives female consumers' satisfaction and emotions. Undeniably, the overall perception of female consumers depends on the product's quality and characteristics (such as price, ingredients, and packaging). This finding is widely noted in previous business and marketing studies (Olsen, 2002; Frank *et al.*, 2014). This study empirically confirmed that the quality of halal cosmetics is an integral aspect in influencing female consumers' satisfaction and emotions. As hypothesized, their emotions and satisfaction increase WTPM and WoM. This finding corresponds with that in previous studies. That is, consumers' emotions and satisfaction positively impact their behavior (Oliver, 2014).

We believe that this is the first empirical study that aimed to assess the significant role of sign value in consumers' behavior toward halal cosmetics. The moderating role of sign value, as shown in [Figure 2](#), produces several useful insights. Implicitly, the sign value portrays the characteristics and personality of female consumers to an extent, and these personal attributes influence their decision-making. This finding aligns with that in the extant literature. Cho and Kerstetter (2004) state that social values and symbolism could be potentially attributed to personality. Schmitt (2012) discussed how different psychological factors shape the individual's identity. That is, the sign value along with environmental factors (such as the source market) are salient predictors of consumer's emotions and behavior.

Assessing the double moderation of sign value and source market, expectations were found to drive emotion and satisfaction. However, these two constructs appeared to be inactive triggers in the structural model. Therefore, it is noteworthy that the twofold functionality of double moderation can predict consumers' unseen responses and attributes. Interestingly, the source market, Southeast Asia, produced variant findings among its internal submarkets, Indonesia and Malaysia. However, the sign value reported the source market's volatility, thereby explaining the formation of consumer's thoughts, characteristics, and reaction processes at the micro level. This occurs overtly in markets that have unequal economic and social factors (Dalir *et al.*, 2020). For instance, the population, geographical expansion, and demographics of a source market can reinforce the variance in consumption behaviors.

Comparative analysis of the source market along with the sign value established a significant distinction between Indonesian and Malaysian markets. Both markets have common social, religious, and cultural values (Islamic/halal beliefs). In terms of gender, Olya *et al.* (2022) highlighted the difference between male and female consumers' behaviors in a middle east country where services and products should be offered based on the halal concept. The assessment of double moderation tacitly illuminated how female consumers' psychological behavior reacted to halal cosmetics. It highlighted the role of religious values in forming the individual identity and behaviors. Recently, Al-Ansi *et al.* (2022) reported how Muslim female symbolism can be recognized by non-Muslim communities (i.e., dress code/hijab). Thus, sign value is clarified as a functional element in driving Muslim female behavior. Conclusively, the concept of double moderation elicited and scrutinized the impact of both personal (sign value) and environmental (source market) factors on consumers' decision-making.

5.1 Implications

This study provides novel insights into the global cosmetics market in general and the halal market in particular. This empirical study unpacked the complexity of consumers' behavior in halal cosmetic markets in South Asia. Theoretically, it defined the cognitive antecedents affecting emotions, satisfaction, and behavioral intentions of halal cosmetic consumers. In doing so, it deepened our understanding of the interaction of individual (sign value) and environmental (source market) factors predicting consumer behavior. It has added to the literature on Muslim consumer behaviors in certain contexts (e.g., halal services). Researchers could consider the vitality of sign value in studying consumer behavior in markets that are heavily affected by cultural or religious values. This empirical study unpacked the complexity of consumers' behavior in halal cosmetic markets. It compared behaviors of consumers across two Islamic countries and showed that the behaviors of consumers toward halal cosmetics are not identical. This means halal consumption and Muslim behavior is not influenced only by the halal law but also by contextual factors. Regarding the managerial implications, the study tested a model that boosts consumers' WTPM and WoM for halal cosmetics, identifying the potential for exponential growth in halal markets. This study has implications for cosmetics firms and manufacturers aiming to create effective strategies to boost the sale of halal cosmetics. Findings suggest that marketing strategies can focus on triggering consumers' emotions and satisfaction to encourage them to spend more on halal cosmetics and recommend the products to others. To do so, the product quality should be improved because it is a crucial element for Indonesian and Malaysian female consumers. Firms can effectively communicate information regarding the product's ingredients, packaging, safety, and accessibility to increase consumers' knowledge of the quality of the products (Aoun and Tournois, 2015; GIER, 2018). Marketers can regularly conduct surveys to check whether the halal cosmetics satisfy consumer expectations and to measure the sign value levels as these moderate the interactions leading to WTPM and WoM. They can then target those groups of consumers that exhibit a high sign value for future communications and promotions.

This study also proposed some practical insights based on the environmental factors of the two source markets. As sign value appeared as a significant factor, marketers can use creative communication tactics (e.g., celebrity branding) to improve sign value perceived by consumers (Shah *et al.*, 2023). They should also consider the preferences and social environment in both markets. For instance, young Indonesian rather than Malaysian females and students represent an emerging target audience for cosmetic firms. Global manufacturers and exporters need to

deeply understand the local **sociocultural** in these markets to increase their products' competitiveness and implement effective labelling, branding, designs, and trademarks. For example, retailers should be confirmed with reliable halal certification and halal assurance standards to ensure they enhance and maintain the product packaging quality. This will essentially influence consumer awareness and image of their cosmetics products. Further, they can assess the performance and marketing strategies adopted by local companies (for instance, Wardah, an Indonesian halal cosmetics manufacturer) (Aoun and Tournois, 2015). Additionally, manufacturers can also focus on catering to specific occasions and seasons that are significant in Muslim culture, such as Ramadan, Hajj, and Umrah. They can achieve this by providing customized skin care products that cater to the specific needs of customers during their travel or stay in Makkah and Madinah, the two holy cities of the Muslim world. From a marketing standpoint, this approach can be developed as an extension of existing brands, emphasizing the production of halal body care products. Doing so will help them reinforce interactions with consumers' social and cultural life relating to their national festivals, holidays, and events. Overall, the halal cosmetics industry is a globally lucrative sector that can bolster economic growth, market mobility, job creation, and financial performance (GIER, 2018).

5.2 Limitations and future research

We believe that this is the first empirical study that investigates the double moderating effect of sign value with source market on the model predicting consumers' WTPM and WoM for halal cosmetics. However, it is not free from limitations, and its drawbacks are listed as follows: First, the study focused on a specific population segment, that is, Southeast Asian (Indonesian and Malaysian) female consumers. This was a sensible decision, considering that generally male consumers do not consume cosmetics. However, future studies can cover a wide population from other regions (such as the Middle East), including male consumers with larger sample sizes. One of the limitations of our research is related to administration of the surveys. In Malaysia data were collected from field surveys whereas due to accessibility issues and social distancing policy data were obtained using online surveys. Future studies in Asian context may not be affected as restrictions around COVID 19 were eased and they may reach their sampling goals in terms of survey format as well sampling approach (e.g., quote sampling). As the behaviors of consumers in two Islamic countries in South Asia toward halal cosmetics are not identical, future studies may compare consumer behaviors in Islamic countries in the Middle East as well as Muslim consumers living in non-Islamic countries.

Second, future research efforts can utilize innovative and multiple methods (experimental research, mixed methods, Lego Serious Play, or ZMET) because modeling consumer behavior toward halal cosmetics is rather complex. Doing so could produce useful insights for international brands that target Muslim consumers in Saudi Arabia, Kuwait, and the UAE, including Korean cosmetic firms (The Korea Times, 2019). Third, a cross-sectional approach was employed in this study. Future studies can utilize this approach to integrate a more complex research design that can decode invisible attributes and antecedents impacting female consumers' intentions (Al-Ansi *et al.*, 2021). This research offers insights from consumer's perspective on the consumption of halal cosmetics. Further research can study the views of industry and policy makers in order to provide a more comprehensive picture of the challenges and prospects of the halal cosmetics business.

6. Conclusion

This study aimed to incorporate the principles of attribution theory to understand what drives consumers to spend more on halal cosmetics and recommend them to others. It tested a model that investigates how consumers' knowledge about such products and their expectations and perceived quality impact their emotions and satisfaction. It also investigated how consumers' emotions and satisfaction affects WTPM and WoM. It contributes to the extant literature by assessing the double-moderating effect of sign value and source market on the model's interactions. The model was tested using data from two countries in Southeast Asia, namely Malaysia and Indonesia. A comparative analysis of the proposed model across two groups of sign values confirmed that Malaysian consumers reactions to halal cosmetics are not identical to Indonesian consumers reactions (c.f. Figure 2). The study's findings can aid retailers and marketers to recognize the invisible attributes that stimulate the emotions, satisfaction, WTPM, and WoM of cosmetics consumers in different markets, where consumers may have varying levels of sign value.

Insert {Appendix A} here

Insert {Appendix B} here

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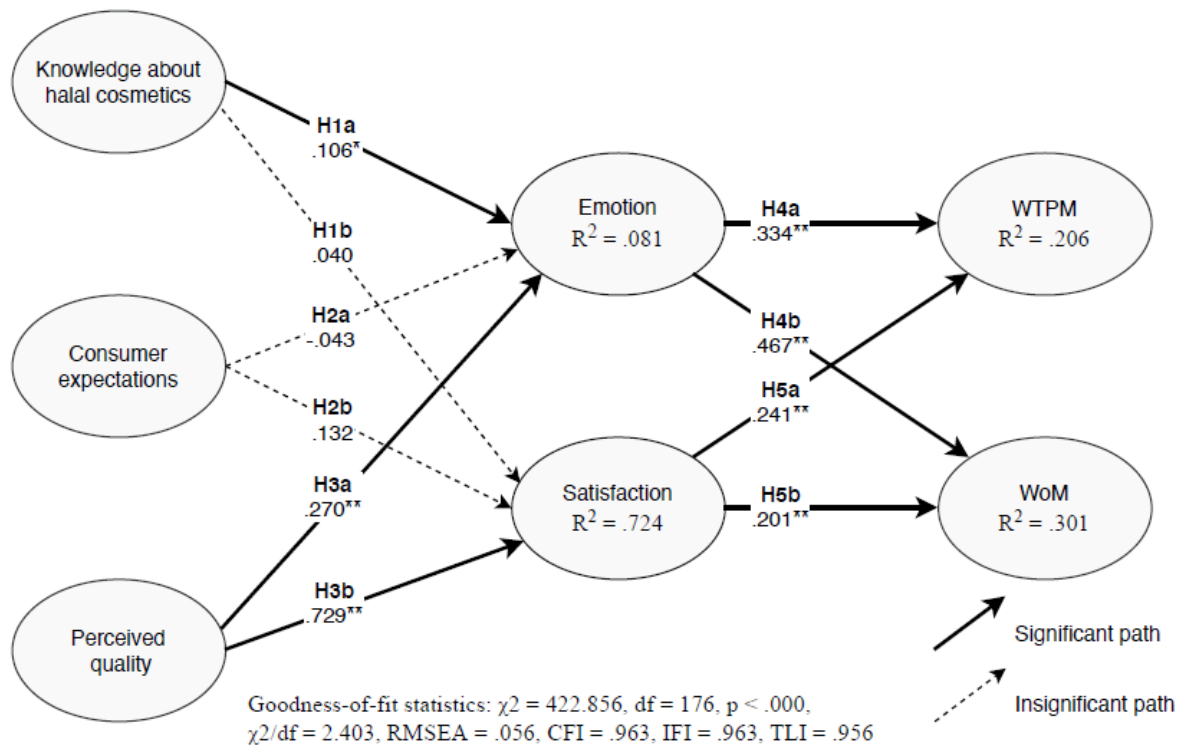


Figure 1: Structural model assessment (n = 441)

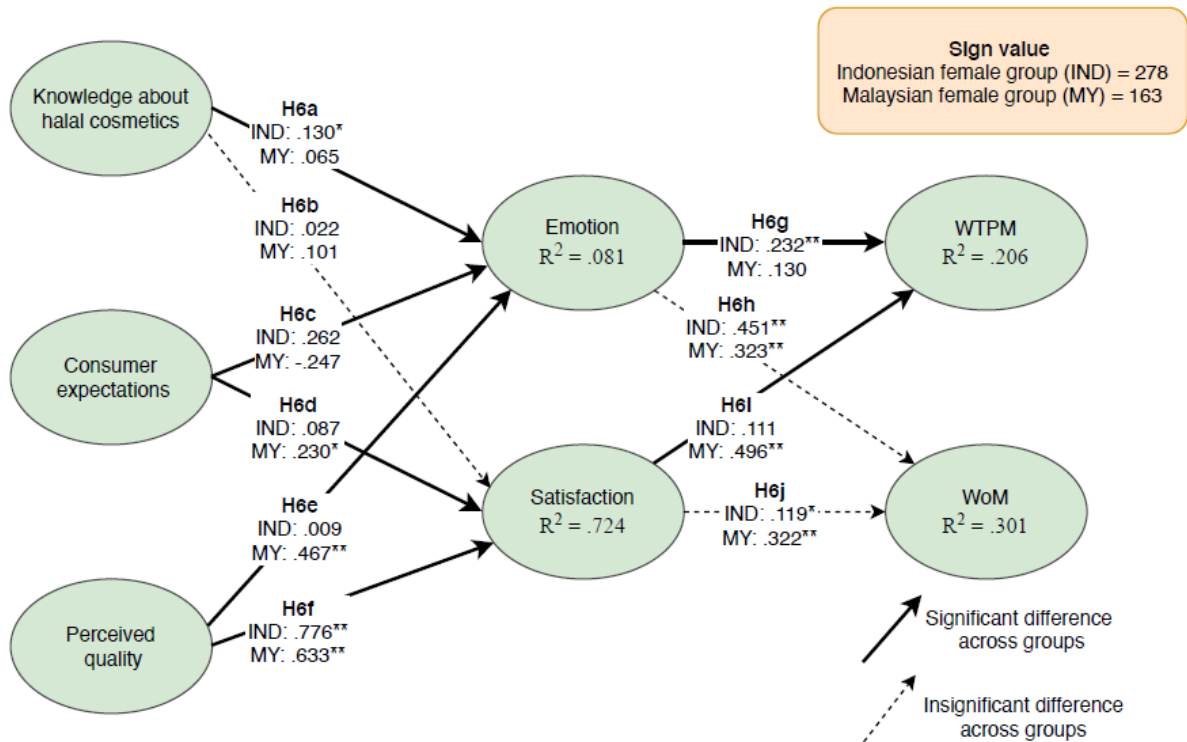


Figure 2: Assessment results of double moderation of sign value and source market

Table 1. Respondents' demographics

Demographic	Indonesian Females (<i>N</i> = 278)		Malaysian Females (<i>N</i> = 163)		Total (<i>N</i> = 441)	
	Frequency	%	Frequency	%	Frequency	%
Age						
18–37 years old	217	78.1	101	61.9	318	72.1
38 years or older	61	21.9	62	38.1	123	27.9
Income in USD (before taxes)						
Under \$14,999	209	75.2	56	34.5	265	60.1
\$15,000–\$24,999	47	16.9	25	15.3	72	16.3
\$25,000–\$34,999	11	3.9	16	9.8	27	6.2
\$35,000–\$44,999	10	3.6	18	11	28	6.3
\$45,000 or higher	1	0.4	48	29.4	49	11.1
Education						
High school degree or less	30	10.8	41	25.2	71	16.1
University/College degree	126	45.3	45	27.6	171	38.8
Master's degree	109	39.2	29	17.8	138	31.3
PhD degree	13	4.7	48	29.4	61	13.8
Marital status						
Single/Divorced	142	51.1	50	30.7	192	43.5
Married/Couples	136	48.9	113	69.3	249	56.5

Source(s): Created by authors

Table 2. Constructs and measurement items

Construct and items	Loading	Mean	SD
Knowledge about halal cosmetics: <i>Strongly Disagree (1) to Strongly Agree (7)</i>			
- I have profound knowledge about halal cosmetics.	.743	4.54	1.39
- Compared to my friends, I am knowledgeable about halal cosmetics.	.944	4.12	1.51
- I am usually the first to know about halal cosmetics in my circle of friends.	.874	4.02	1.56
Consumer expectations: <i>Strongly Disagree (1) to Strongly Agree (7)</i>			
- My overall expectation of the quality of available halal cosmetic products is fulfilled.	.783	5.08	1.36
- My personal requirement and expectation of available halal cosmetic products is fulfilled.	.769	4.92	1.40
- Halal cosmetic product's offering is same as I expected.	.847	5.01	1.37
Perceived quality: <i>Strongly Disagree (1) to Strongly Agree (7)</i>			
- My overall perception of available halal cosmetic products is satisfactory.	.880	4.95	1.35
- Halal cosmetic product's offering is customized to meet consumer needs.	.848	4.97	1.37
- Halal cosmetic product's offering is the same as its promise.	.750	5.01	1.21
Emotion: <i>To me, the consumption of halal cosmetics is</i>			
- Unpleasant (1) ~ Pleasant (7)	.855	5.80	.974
- Foolish (1) ~ Wise (7)	.939	5.90	.888
- Harmful (1) ~ Beneficial (7)	.820	5.85	.972
- Unattractive (1) ~ Attractive (7)	.830	5.75	.987
Satisfaction: <i>Strongly Disagree (1) to Strongly Agree (7)</i>			
- I am satisfied with the available halal cosmetic products.	.851	4.88	1.35
- Halal cosmetic products meet my expectations.	.931	4.95	1.33
- The quality of halal cosmetic products is quite close to my ideal cosmetic products.	.829	4.87	1.36
Sign value: <i>Strongly Disagree (1) to Strongly Agree (7)</i>			
- The halal cosmetics I use reveal the kind of person I am.	.973	4.96	1.62
- You can tell a lot about a person by the type of cosmetic products they consume.	.600	4.54	1.73
Willingness to pay more (WTPM): <i>Strongly Disagree (1) to Strongly Agree (7)</i>			
- It is acceptable to pay more for halal cosmetic products.	.814	4.90	1.49
- I would pay more for halal cosmetic products.	.907	4.95	1.41
- I would be willing to pay a premium fee to purchase halal cosmetic products.	.814	4.75	1.47
Word of Mouth (WoM): <i>Strongly Disagree (1) to Strongly Agree (7)</i>			
- My general intention to consume halal cosmetics compared to non-halal cosmetic products is very high.	.917	5.88	6.01
- Comparing non-halal cosmetic products, I will recommend halal cosmetics to others.	.916	1.30	1.20
Goodness-of-fit statistics: $\chi^2 = 420.471$, $df = 202$, $p < .000$, $\chi^2/df = 2.082$, RMSEA = .050, CFI = .969, IFI = .969, TLI = .961			

Source(s): Created by authors

Table 3. Structural model assessment (n = 441)

Hypothesized path				Coefficient	t-value	Significant
H1 _a	Knowledge about halal cosmetics	→	Emotion	.106	1.992*	Yes
H1 _b	Knowledge about halal cosmetics	→	Satisfaction	.040	1.130	No
H2 _a	Consumer expectations	→	Emotion	-.043	-.414	No
H2 _b	Consumer expectations	→	Satisfaction	.132	1.847	No
H3 _a	Perceived Quality	→	Emotion	.270	2.660**	Yes
H3 _b	Perceived Quality	→	Satisfaction	.729	2.258**	Yes
H4 _a	Emotion	→	WTPM	.334	6.518**	Yes
H4 _b	Emotion	→	WoM	.467	9.154**	Yes
H5 _a	Satisfaction	→	WTPM	.241	4.789**	Yes
H5 _b	Satisfaction	→	WoM	.201	4.307**	Yes
Indirect effect on Willingness to Pay more (WTPM)				Indirect effect on Word of Mouth (WoM)		
Knowledge about halal cosmetics = .045*				Knowledge about halal cosmetics = .057*		R ² Emotion = .081
Consumer expectations = .017				Consumer expectations = .006		R ² Satisfaction = .724
Perceived Quality = .266**				Perceived Quality = .273**		R ² for Word of Mouth (WoM) = .301
						R ² for Willingness to Pay (WTPM) = .206

Note: Goodness-of-fit statistics: $\chi^2 = 422.856$, $df = 176$, $p < .000$, $\chi^2/df = 2.403$, RMSEA = .056, CFI = .963, IFI = .963, TLI = .956; * $p < .05$, ** $p < .01$.

Source(s): Created by authors

Table 4. Metric invariance results for sign value (Indonesian vs. Malaysian consumer)

Path	Indonesian group (N = 278)		Malaysian group (N = 163)		Nested model (Constrained to be equal)	Non-restricted
	Beta	t-value	Beta	t-value		
H6_a : Knowledge → Emotion	.130	1.967*	.065	.764	$\chi^2(512) = 911.437$	$\chi^2(513) = 911.952$
H6_b : Knowledge → Satisfaction	.022	.485	.101	1.903	$\chi^2(512) = 911.437$	$\chi^2(513) = 912.631$
H6_c : Expectations → Emotion	.262	1.914	-.247	-1.396	$\chi^2(512) = 911.437$	$\chi^2(513) = 916.220$
H6_d : Expectations → Satisfaction	.087	.901	.230	2.096*	$\chi^2(512) = 911.437$	$\chi^2(513) = 912.593$
H6_e : Perceived quality → Emotion	.009	.072	.467	2.719**	$\chi^2(512) = 911.437$	$\chi^2(513) = 914.280$
H6_f : Perceived quality → Satisfaction	.776	6.961**	.633	5.661**	$\chi^2(512) = 911.437$	$\chi^2(513) = 916.260$
H6_g : Emotion → WTPM	.232	3.490**	.130	1.719	$\chi^2(512) = 911.437$	$\chi^2(513) = 912.262$
H6_h : Emotion → WoM	.451	7.218**	.323	4.050**	$\chi^2(512) = 911.437$	$\chi^2(513) = 912.942$
H6_i : Satisfaction → WTPM	.111	1.715	.496	5.745**	$\chi^2(512) = 911.437$	$\chi^2(513) = 923.310$
H6_j : Satisfaction → WoM	.119	2.082*	.322	3.993**	$\chi^2(512) = 911.437$	$\chi^2(513) = 914.942$
Chi-square difference test:					Goodness-of-fit statistics for the baseline model for groups: p < .000, $\chi^2/df = 1.780$, RMSEA = .042, CFI = .947, IFI = .948, TLI = .933	
^{H6a} $\Delta\chi^2(1) = .515$, p = .473, > .05 (Supported) ☆						
^{H6b} $\Delta\chi^2(1) = 1.94$, p = .275, > .05 (Not supported)						
^{H6c} $\Delta\chi^2(1) = 4.78$, p = .029, < .05 (Supported)						
^{H6d} $\Delta\chi^2(1) = 1.25$, p = .282, > .05 (Supported) ☆☆☆						
^{H6e} $\Delta\chi^2(1) = 2.84$, p = .092, < .05 (Supported)						
^{H6f} $\Delta\chi^2(1) = 4.82$, p = .028, < .05 (Supported)						
^{H6g} $\Delta\chi^2(1) = .825$, p = .364, > .05 (Supported) ☆						
^{H6h} $\Delta\chi^2(1) = 1.50$, p = .220, > .05 (Not supported)						
^{H6i} $\Delta\chi^2(1) = 11.87$, p = .001, < .01 (Supported)						
^{H6j} $\Delta\chi^2(1) = 3.505$, p = .061, > .05 (Not Supported)						

Note: * $p < .05$, ** $p < .01$.

☆☆ for H6_a and H6_g: While the links for the Indonesian consumers were significant, the paths for the Malaysian consumers were insignificant. Thus, although chi-square differences across groups did not differ significantly, H6_a and H6_g were supported. ☆☆☆ for H6_d: While the link for the Malaysian consumers was significant, the paths for the Indonesian consumers was insignificant. Thus, although chi-square differences across groups did not differ significantly, H6_d was supported.

Source(s): Created by authors

Appendix- A. Measurement model assessment

Construct	1	2	3	4	5	6	7	8
1. Willingness to pay more	.846							
2. Consumer expectations	.262	.800						
3. Knowledge about halal cosmetics	.259	.331	.858					
4. Emotion	.382	.200	.157	.862				
5. Satisfaction	.314	.724	.285	.257	.871			
6. Perceived quality	.295	.796	.285	.258	.844	.828		
7. Word of mouth	.493	.312	.302	.509	.307	.278	.917	
8. Sign value	.425	.348	.418	.263	.307	.314	.577	.808
Composite reliability (CR)	.883	.842	.892	.920	.904	.867	.913	.781
Average variance extracted (AVE)	.716	.641	.736	.744	.759	.685	.840	.653

Note: Squared AVE values are shown on the main diagonal (**Bolded**).

Source(s): Created by authors

Appendix B

Study areas: Southeast Asian Cosmetic Markets

Southeast Asia has become a prominent business hub, attracting numerous global cosmetic producers. For instance, Indonesia and Malaysia have a combined population of nearly 300 million, with many female consumers. The total annual spend on cosmetics in both markets is nearly USD 7 billion (GIER, 2018). These cosmetics comprise different types of products, including personal care and beauty products. The Indonesian cosmetics market imported products worth USD 330 million in 2018, importing 50% more than the previous year (The Korea Times, 2019). Moreover, the market is expected to see a continuous growth due to increasing population and birth rates (World Population Review, 2022). However, cosmetic manufacturers targeting Indonesian and Malaysian markets must consider various territorial factors, such as culture, demographics, environment, and lifestyle. For example, governmental policies and trading activities (exporting and importing) promote the halal market, influencing local consumers' behavior. Thus, the demand for cosmetic products in these countries is potentially influenced by culture and religious beliefs (GIER, 2018). Aoun and Tournois (2015) studied the integration of religious concepts into marketing practices (halal branding), providing salient insights on consumption and purchase behavior in faith-based markets. They also showed how cosmetic branding in such markets involves emotional and spiritual aspects on top of conventional ones. Governmental rules concerning trade of cosmetic products differ in Indonesia and Malaysia. However, the framework for business activities in both countries conforms significantly to the halal concept (Jefriando & Suroyo, 2019; GIER, 2018).



Female shoppers buy cosmetics from a new Korean makeup store that opened in Jakarta, Indonesia.

Source: www.korea.net