



RESEARCH ARTICLE

Exploring Brand Attitude in Thailand's Organic Skincare Market: The Role of Perceived Quality, Customer Satisfaction, and the Marketing Mix

Narit Vittayavarakorn¹, Puris Sornsaruht^{2*}

^{1,2} College of Educational Innovation Research (CEIR), King Mongkut's Institute of Technology Ladkrabang (KMITL), Bangkok, Thailand

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ABSTRACT

This comprehensive study delves into Thailand's organic skincare industry dynamics, specifically examining the impact of perceived quality, customer satisfaction, and the marketing mix on brand attitude. In 2023, utilizing systematic random sampling, 453 organic skincare users participated in the study, with their responses subjected to testing through expert-validated questionnaires. The primary objective was to construct a structural equation model (SEM) for variables influencing brand attitude, employing a questionnaire with an IOC value ranging between 0.60 and 1.00 and a reliability (α) value of 0.94 to 0.97. Employing LISREL 9.10 for latent variable path analysis, the data analysis affirmed the precision of the developed SEM, consistently aligning with empirical data. The study conclusively establishes that perceived quality, customer satisfaction, and the marketing mix are strong determinants of positively shaping brand attitude. Collectively, these causal variables contribute 93% of the variance in factors influencing brand attitude (R^2). Notably, perceived quality emerges as the strongest influencer, followed closely by customer satisfaction and the marketing mix. This research advances consumer behavior and innovation theories by showing the crucial links, particularly the relationship between brand attitude and perceived quality. Beyond theoretical contributions, the study furnishes actionable insights for entrepreneurs, marketers, and policymakers. By bridging the gap between theory and practice, this research facilitates informed decision-making and adaptable strategies for all stakeholders.

***Corresponding Author:**

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INTRODUCTION

Cosmetics and skincare products play an integral role in consumers' daily lives globally, transcending gender and age boundaries. Despite not being perceived as life's top priority, their undeniable impact on daily routines cannot be overlooked, contributing to personal hygiene, pleasant fragrances, and enhanced appearance. A recent global survey by Euromonitor International (2022) highlighted that the primary motivation for cosmetics use, according to 20,320 respondents, was to 'look healthy,' aligning with Salvioni et al. (2021), who emphasized the industry's expansion due to individuals' perceptions of contributing to personal wellness.

Thailand's cosmetics and skincare industry is witnessing sustained growth, fueled by a burgeoning focus on beauty and self-enhancement among modern Thai individuals (Thongsanit et al., 2019; Panitsettakorn et al., 2023; Vittayavarakorn & Sornsaruht, 2024). Referring to Thailand as the 'ASEAN's beauty epicenter,' Panitsettakorn et al. (2023) stated that the cosmetics sector within the Kingdom in 2022 exceeded \$7.3 billion. Data supports the 'epicenter' label as 2020 Thailand's

cosmetics sector was valued at \$6.8 billion, representing nearly 25% of the ASEAN countries' total sales of \$27.7 billion. Moreover, regulation alignment with ASEAN through implementing the ASEAN Harmonized Cosmetic Regulatory Scheme (AHCERS) is anticipated to improve organizational competitiveness throughout the supply chain (Mahanakorn Partners Group, 2022).

Skincare products hold particular significance in the cosmetics market, experiencing substantial growth and claiming a significant market share in Thailand (Khanthong et al., 2020; Vittayavarakorn & Sornsaruht, 2024). The increasing demand for skincare products is attributed to diverse weather conditions, rising pollution, and a growing segment of consumers adopting skincare routines from a young age (Shim et al., 2024).

Despite the industry's growth, SME entrepreneurs must navigate the competitive cosmetics market by enhancing potential and opportunities for market entry. Strategies such as sourcing innovations, adhering to industry standards, and developing diverse distribution channels become crucial (Cheewathanakornkul & Jiratchot, 2018).

Customer satisfaction with organic skincare products hinges on factors like perceived service quality, product reliability, and pricing that align with the benefits received (Sangchanrung, 2017). Anucha (2023) adds that sensory experiences significantly influence organic skincare product purchase intention, emphasizing the importance of positive employee demeanor contributing to overall satisfaction (Banuraj, 2023). Perceived quality, encompassing functional value, environmental consciousness, and health consciousness, plays a pivotal role in repurchase intention for natural beauty products (Ahmad & Omar, 2018).

The attitude towards organic skincare brands is a critical factor shaped by consumers' perceptions and interactions, influenced by advertisements and peer endorsements (Schmuck et al., 2018). When combined with online marketing and social media influencers, the marketing mix, which is a traditional strategy can be a powerful tool in developing and keeping positive brand attitudes (Pimdee et al., 2023). Finally, effective use of online marketing contributes significantly to customer satisfaction with organic skincare products.

In conclusion, understanding the interconnected elements affecting organic skincare brand attitude provides insights for entrepreneurs, marketers, and policymakers, facilitating informed decisions and contributing to the sector's growth.

Statement of the problem

The organic skincare industry stands at the crossroads of consumer preferences, cultural nuances, and the dynamic landscape of marketing in the digital age. As consumers increasingly prioritize wellness, environmental consciousness, and product efficacy, comprehending the intricate web of factors influencing their perceptions and behaviors becomes paramount. This intricate milieu encompasses the perceived quality of organic skincare products, the role of sensory experiences, the impact of marketing strategies, and the nuanced dance of customer satisfaction.

Research objectives

RQ1: Unraveling perceived quality: Explore customers' perceptions of overall organic skincare product quality, investigating elements such as reliability, alignment with customer needs, and superiority compared to competitors.

RQ2: Navigating the nexus of consciousness: Assess how functional value, environmental consciousness, and health consciousness contribute to perceived quality in organic skincare.

RQ3: Crafting customer satisfaction: Identify the factors significantly contributing to customer satisfaction with organic skin care products, delving into aspects like service quality, product reliability, and pricing alignment with perceived benefits.

RQ4: Deciphering brand attitude dynamics: Investigate the interconnected elements of perceived quality, customer satisfaction, and marketing mix, deciphering their roles in shaping variations in brand attitude among organic skincare customers (Chuenban et al., 2021).

These focused research objectives aim to illuminate critical facets of the organic skincare landscape, from the initial perceptions of product quality to the intricate dance of factors influencing brand attitude. As the industry navigates through diverse consumer segments and competitive landscapes, understanding these dimensions becomes pivotal for academic inquiry and practical application by SME entrepreneurs seeking to thrive in this vibrant and evolving market.

LITERATURE REVIEW

Perceived quality (PER)

Customer perception of product quality (PER) is pivotal in marketing, influencing value and customer satisfaction and, consequently, impacting product demand (Kotler et al., 2021). In the realm of skincare, Ngcamu et al. (2023) underscore the significance of a high-quality product, coupled with effective marketing strategies, in capturing customer interest and guiding product selection. Jabeen et al. (2023) investigated the influence of a manufacturer's reputation on brand image and purchase intention, revealing critical skincare variables such as perceiving the brand as high-quality, fostering customer trust, and employing effective strategies to create products that resonate with customers.

Within Indonesia, Wirasti et al. (2019) emphasized the importance of perceived quality in influencing choices for herbal skincare brands, where factors like product quality, affordability, price, and safety contribute significantly to customer loyalty. Notably, perceived quality emerged as the most influential factor. Conversely, a study conducted in China identified sensory appeals and natural ingredients as primary quality indicators shaping perceptions of organic skincare (Huang & Lu, 2020). These findings underscore the multifaceted nature of perceived quality, wherein sensory appeal, natural ingredients, product quality, brand trust, and alignment with customer expectations collectively mold consumer perceptions. Consequently, perceived quality is pivotal in influencing purchase intentions, especially within the skincare industry.

Furthermore, research highlights the nuanced aspects shaping perceived quality within diverse cultural contexts. For example, the Indonesian study by Wirasti et al. (2019) illuminates unique factors contributing to perceived quality, including the significance of product safety and affordability. In China, Huang and Lu's (2020) research underscores the importance of sensory appeals and natural ingredients, aligning with cultural preferences for organic products. Similarly, in Malaysia, Lee et al. (2019) concluded that PQ is the most significant factor influencing consumers' purchase intention of skincare products. In Vietnam, Nguyen and Dekhili (2019) found that a lack of information and confidence in green claims, sellers, and certifications hindered green product purchase intention.

Recognizing these nuances becomes imperative for marketers seeking to tailor their strategies effectively in diverse markets. The intricate nature of perceived quality, encompassing factors like sensory appeal, natural ingredients, superior product quality, brand trust, and alignment with customer expectations (Hanifati & Salehudin, 2021), underscores its complex role in shaping consumer perceptions across different regions. As diverse cultural preferences influence skincare products, marketers must strategically navigate this complexity, acknowledging the factors contributing to perceived quality in distinct markets. Therefore, from the authors' review of the literature and theory, the following three hypotheses are proposed:

H1: Perceived quality (PER) influences customer satisfaction (CUS) directly and positively.

H2: Perceived quality (PER) influences the marketing mix (MAR) directly and positively.

H3: Perceived quality (PER) influences brand attitude (BRA) directly and positively.

Marketing mix (MAR)

Exploring the intricate facets of the marketing mix (MAR) in the skincare domain, a comprehensive men's skincare study conducted in Bangkok by Khanthong et al. (2020) sought to delineate the key factors influencing purchasing decisions. The study, which prioritized MAR elements, underscored the paramount importance of sales promotion as the primary driver. Subsequently, the hierarchy included packaging, price, brand, and available skincare products.

In a parallel exploration, Genoveva and Levina (2019) focused on MAR factors within the context of Body Shop in Indonesia. Their study identified green MAR elements and the perceived necessity for environmentally friendly products as pivotal conditions influencing purchase intentions. Meanwhile, in the context of Myanmar, a study by Thu (2019) delved into the impact of marketing mix elements on consumer cosmetic product purchase intentions, highlighting the predominant role of cosmetic product promotion in shaping purchase intentions.

Further amplifying the understanding of MAR dynamics, Rahman et al. (2019) delved into the components of MAR in Indonesia. Their findings underscored a robust and positive correlation between MAR elements and brand image, emphasizing the strategic importance of MAR in shaping consumer perceptions.

These diverse studies collectively contribute to an enriched comprehension of MAR dynamics in the skincare industry. From sales promotion to packaging, pricing, brand perception, and product assortment, the multifaceted nature of MAR plays a crucial part in shaping brand image and consumer behavior. Recognizing these dynamics becomes imperative for skincare marketers aiming to craft effective strategies tailored to diverse markets and consumer preferences. Therefore, from the authors' review of the literature and theory, the following two hypotheses are proposed:

H4: The marketing mix (MAR) influences customer satisfaction (CUS) directly and positively.

H5: The marketing mix (MAR) influences brand attitude (BRA) directly and positively.

Customer satisfaction (CUS)

Embarking on customer satisfaction (CUS), Miswanto and Angelia (2018) stated that customer contentment springs from the bedrock of trust in products. The alignment of product price with perceived benefits further augments customer satisfaction. Therefore, satisfaction comes from distinct experiences, where friendly and knowledgeable staff, transparent financial transactions, and swift service coalesce to cultivate a satisfied customer base.

Cheewathanakornkul and Jiratchot (2018) also reported on satisfaction and indicated it is an intricate dance between product trustworthiness and the equilibrium of price and benefits. The holistic satisfaction experience is crafted through interactions with affable and informed staff, their integrity in financial dealings, and overall service efficiency. Customer satisfaction emerges as a tapestry woven with the threads of unique and gratifying experiences.

Adding a regional perspective, Peng et al. (2018) comprehensively explore sustainable strategies influencing purchase intention and customer satisfaction in Malaysia. Their findings underscore the pivotal role of factors such as a store's product variety, aesthetic appeal, and convenience in shaping purchase intentions and customer satisfaction. This insight serves as a compass for businesses seeking to navigate the landscape of customer satisfaction in a dynamic market.

Exploring customer satisfaction transcends the mere transactional realm, encompassing trust, pricing dynamics, staff interactions, and the overall shopping experience. Understanding and harnessing these multifaceted elements are imperative for businesses aspiring to foster enduring satisfaction among their customer base. Therefore, from the authors' review of the literature and theory, the following hypothesis is proposed:

H6: Customer satisfaction (CUS) influences brand attitude (BRA) directly and positively.

Brand attitude (BRA)

Exploring the determinants of BRA in the context of organic skincare, Jinying's (2019) study delved into the preferences of 400 Chinese consumers in China. The research uncovered that health consciousness and social influence significantly and positively contribute to perceived value and brand attitude. Similarly, Malik and Sharma's (2020) investigation in India highlighted the enduring preference of Indian women for natural ingredients in cosmetic products, emphasizing the importance of skin safety, environmental awareness, and word-of-mouth in shaping brand attitudes.

Szaban (2023) augmented these insights from the author's literature review, stressing the critical role of appearance and environmental awareness as pivotal aspects influencing brand attitude in organic personal care products. Schmuck et al. (2018) further expounded on brand attitude, emphasizing the role of product knowledge and cultivating positive sentiments toward the product. Effective advertising, particularly when influencing the perceptions of those around consumers who use the same product, was identified as a catalyst for positive changes in brand attitudes. Moreover, customer satisfaction with a product was recognized as an influential factor in shaping brand attitudes. Building on this foundation, Naheed et al. (2023) delved into the impact of brands on consumer purchase intentions. The findings revealed that price, product quality, and digital marketing have a significant impact on consumer satisfaction, while reports are insignificant on brand image.

In the realm of consumer behavior, Dave (2023) delved into the impact of visual packaging on a consumer's perception of food product quality and brand preference. Parallel findings were presented by O'Callaghan and Kerry (2016), establishing a correlation between increased product familiarity and a consumer's positive attitude toward technologically driven changes in packaging. Grinsven and Das (2016), exploring the significance of brand logos, proposed that simple logos offer short-term benefits, whereas complex logos provide enduring advantages. Brand attitude, particularly among female South African consumers, emerged as a crucial metric in assessing prospective buyer behavior, as highlighted by Venter de Villiers et al. (2018). The selection process, underscored by a consumer's association with a specific brand, significantly influences a brand's success (Ansary & Hashim, 2018). Furthermore, research on Italian organic food consumers by Nosi et al. (2020) emphasized the pivotal role of a vendor's Corporate Social Responsibility (CSR) image and the perceived ecological welfare value in shaping consumer attitudes.

In essence, these comprehensive findings underscore the multifaceted nature of brand attitude in the skincare industry, emphasizing the interconnected influence of customer behavior, product knowledge, liking of the product, understanding the brand, advertising impact, and the influence of individuals using the same product. Understanding these dynamics is crucial for marketers seeking to shape and enhance brand attitudes within organic skincare effectively.

Objectives of the research

In light of the theoretical and empirical insights gathered from the literature, the primary objective of this research was to discuss the key determinants and interrelationships that wield the most influence on customer brand attitude (BRA). To accomplish this objective, a questionnaire was utilized, encompassing four latent variables and 20 observed variables, and serves as the basis for developing and empirically testing the six hypotheses (Figure 1). Additionally, a CFA was used to assess the model's goodness-of-fit (GoF).

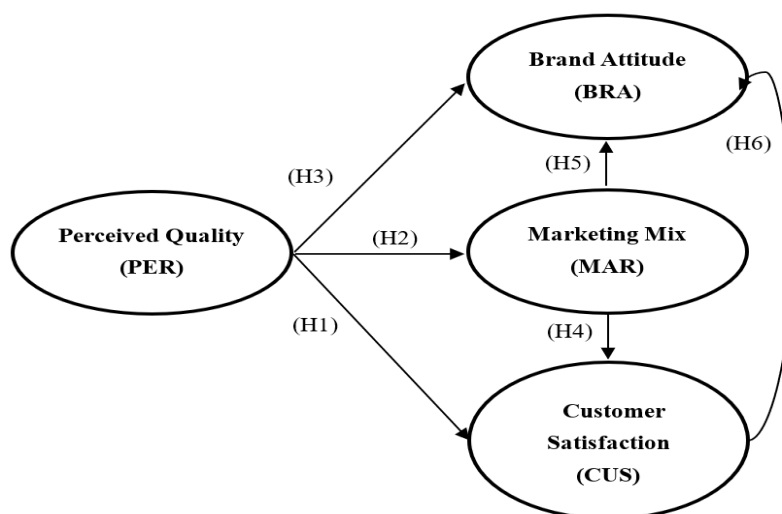


Figure 1: Conceptual model for factors influencing organic skincare brand attitude (BRA)

Source: The authors

MATERIALS AND METHODS

Population and sample

The study focuses on the organic skincare product customer population in Thailand in 2023, encompassing facial care, body care, sun protection, and lip care products (Anucha, 2023; Jinying, 2019; Othman et al., 2017; Sangchanrung, 2017). The systematic random sampling technique was employed, selecting every fifth organic skincare product customer from four prominent Bangkok metropolitan area shopping malls.

Targeting a sample size of 500 was grounded in established principles for Structural Equation Model (SEM) analysis. Rahman (2023) recommends a minimum sample size of 200, with larger samples advised for more complex models. To account for model complexity, the study adopted a multiple of the total manifest variables, which, in this case, amounts to 20 observed variables. This aligns with the commonly cited multiples Schumacker and Lomax (2016) proposed, ranging from 10 to 20.

Questionnaire development

The foundation of the study was the development of a comprehensive, five-part, 7-level, Likert-type agreement scale questionnaire (Table 1).

Table 1: Survey questionnaire contents discrimination power, reliability (α), and supporting literature

Section	Questionnaire Section Content	D.P.	(α)	Supporting Literature
Personal Information (PI)	The section contained items about the respondents' personal information. It included options related to gender, age, highest education level, marital status, profession, and monthly income.	N/A	N/A	(Ahmad and Omar, 2018; Anucha, 2023; Banuraj, 2023; Cheewathanakornkul and Jiratchot, 2018; Euromonitor International, 2022; Halim et al., 2020; Khanthong et al., 2020; Salvioni et al., 2021; Sangchanrung, 2017; Schmuck et al., 2018; Thongsanit et al., 2019).
Perceived Quality (PER)	This section contained items about the overall perceived quality of the product. It covered aspects such as overall product quality, reliability, product alignment with customer needs, superior quality compared to competitors, and meeting customer expectations.	0.82-0.91	0.97	(Amberg and Fogarassy, 2019; Hanifati and Salehudin, 2021; Huang and Lu, 2020; Kotler et al., 2021; Lee et al., 2019; Nguyen and Dekhili, 2019; Othman et al., 2017; Salvioni et al., 2021; Wirasti et al., 2019).
Marketing Mix (MAR)	This section contained items related to the marketing mix. It covered product characteristics/roles, reasonable and fair product pricing, employee competence in providing service, sales promotion processes, and diverse distribution channels.	0.70-0.88	0.95	(Genoveva and Levina, 2019; Halim et al., 2020; Khanthong et al., 2020; Rahman et al., 2019; Simabjuntak et al., 2024; Thu, 2019)
Customer Satisfaction (CUS)	This section contained items about overall satisfaction with the product and service. It included trust in the brand, timely and reliable service, purchase decision-making, and benefits received from the product.	0.65-0.84	0.94	(Cheewathanakornkul & Jiratchot, 2018; Miswanto & Angelia, 2018; Nguyen, 2020; Peng et al., 2018)

Brand Attitude (BRA)	This section contained items about the respondents' attitudes toward the brand. It involved liking the product and services, perception of the product through online media, information-seeking behavior, understanding of product usage, and positive feelings about using the product.	0.81-0.90	0.97	(Ansary & Nik Hashim, 2018; Chuchu et al., 2018; Nosi et al., 2020; O'Callaghan & Kerry, 2016).
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Note. D.P. = discrimination power, reliability = (α)

The data collection involved an online questionnaire using Google Forms, targeting skincare product consumers in Thailand in 2023 (Halim et al., 2020). A systematic random sampling method was employed, surveying 500 customers across four large retail stores in Bangkok from February to April 2023. The returned and complete questionnaires totaled 453, representing 90.60% of the sample group.

The data analysis involved assessing the validity of the structural equation model using path analysis with latent variables. LISREL 9.10 software was used for this purpose. The study also interpreted the meaning of the structural equation model's direct effects on brand attitude using GoF indices.

Quality assessment of the survey's questionnaire

After creating the questionnaire, content and construct validity (CV) were evaluated. This step is crucial in assessing the robustness and design strength of the study. A common approach to achieving this involves inviting experts relevant to the study's topics. Five experts were enlisted in this instance, providing their insights on each questionnaire item. The preliminary questionnaire was meticulously reviewed during an initial focus group session on a Saturday afternoon. Experts actively participated in a question-and-answer session, offering valuable perspectives on the proposed project's framework, taking into account factors like phrasing, appropriateness, and significance.

The evaluation employed the index of item-objective congruence (IOC) rating scale, and items with IOC values below 0.67 were considered for revision or removal based on the feedback from the experts. Subsequently, a reliability assessment of the questionnaire was conducted through a pilot test involving 30 consumers of organic skincare products at a student shopping complex near the authors' university. Cronbach's alpha (α) values were used for the reliability assessment, with a threshold of $\geq .80$ deemed acceptable for customer organic skincare brand attitude survey items. All questionnaire sections demonstrated high reliability, with α values for the latent variables ranging from 0.94 to 0.97. None of the 30 pilot-test questionnaires were included in the final survey analysis.

Data collection

Created in the Thai language, questionnaires were transferred onto a Google Form for the survey (Amberg & Fogarassy, 2019; Jinying, 2019). The systematic random sampling approach identified every fifth shopper in the skincare product section of four department stores, covering sun protection, lip products, and facial and body care items. The survey was conducted from February through April 2023, with prior approval secured from each store's management and ethical clearance from the authors' university.

Upon identifying potential participants among organic skincare consumers, individuals were invited to partake in the online survey at the product counter. Those expressing affirmative interest received a QR code to scan, facilitating their participation in the onsite survey. A total of 453 questionnaires, constituting 90.60% of the sample, were deemed complete and usable (Table 2).

Combining systematic random sampling and online survey administration, this approach ensured a reliable dataset for the subsequent analysis, offering insights into the perceptions and behaviors of organic skincare consumers in Thailand.

Table 2: Sample collection process (n=453)

Types of organic skin care products	Sampling Process		
	Target	Collected	%
Facial care products	125	119	95.20
Body care products	125	107	85.60
Sun protection products	125	112	89.60
Products for lips	125	115	92.00
Totals	500	453	90.60

Data analysis

The data underwent analysis utilizing LISREL 9.1, focusing on CFA and SEM. To gauge participants' opinions effectively, a seven-level opinion scale was employed, where 7 represented 'strongly agree' (within the range of 6.11-7.00), 6 denoted 'mostly agree' (5.25-6.10), 5 as 'agree' (4.41-5.25), 4 as 'moderate agreement' (3.56-4.40), 3 as 'little agreement' (2.71-3.55), 2 as minimal agreement (1.86-2.70), and 1, indicating 'no agreement' (1.00-1.85) (Chuenban et al., 2021). To complement this, SPSS® for Windows Version 21 facilitated a comprehensive descriptive statistics analysis. This step provided valuable insights into the participants' responses, offering a nuanced understanding of the distribution and trends within the dataset.

Subsequently, a meticulous examination of the model fit and value validity of each consumer's opinions regarding brand attitude was conducted. CFA was employed alongside GoF (Goodness of Fit) index criteria, ensuring a rigorous evaluation of the model's appropriateness and effectiveness in capturing the intricacies of consumer perceptions. This comprehensive approach provided a robust foundation for the subsequent interpretation and implications of the study's findings.

RESULTS

Organic skincare customer information (n=453)

The customers who responded to the organic skincare survey were mostly women (67.11%), with 31.13% being between 31-40 years of age, while the next group of 30.02% were 41-50. Most survey consumers were well-educated, with 79.91% having an undergraduate degree or higher. Concerning relationships, 57.17% indicated they were single, 34.22% as married, and 8.61% as 'other.' Additionally, 41.28% indicated a Thai government agency employed them, while another 32.45 indicated they worked in private enterprises. Monthly incomes for the 453 respondents indicated that 32.45% earned between 15,001-30,000 baht per month (\$439-\$879), 31.35% responded they were earning 30,001-45,000 baht per month (\$880-\$1,317), 20.75% indicated they made less than 15,000 baht per month (\$438), and the rest (15.45%) checked they were making over 45,001 baht per month (\$1,1358). Finally, when asked to select one of four organic skincare name brands they regularly purchase as a choice, Brisuthi came out on top with 23.18%, followed by Na Ha Thai (22.74%) and Skinplants (17.88%), and Rawganic (16.11%). Another 20.09% indicated they purchased another brand.

CFA GoF analysis

In assessing the GoF for our CFA, we employed LISREL 9.1 software criteria as well as scholarly recommendations from Schumacker and Lomax (2016). Convergent validity (CV) analysis incorporated key indicators such as the GFI, CFI, RMSEA, and the chi-square/df statistic. According to Schumacker and Lomax (2016), GFI, AGFI, NFI, and CFI values ≥ 0.90 are considered indicative of a well-fitting model. Additionally, the chi-square (χ^2) statistic with $p \geq 0.05$ and a relative Chi-square (χ^2/df) ≤ 2.00 , further contributes to the comprehensive evaluation of model fit. Sathyanarayana and Mohanasundaram (2024) reported that values for RMSEA, RMR, and SRMR should ideally be ≤ 0.05 .

Our analysis reveals compelling fit indices, with $\chi^2 = 0.16$, $\chi^2/df = 1.14$, and RMSEA = 0.02, underscoring the model's excellent fit. Moreover, GFI = 0.97, AGFI = 0.95, RMR = 0.01, SRMR = 0.01, NFI = 1.00, and CFI = 1.00, collectively affirming the robustness and reliability of our model. Additionally, Cronbach's Alphas ranging from 0.94 to 0.97 further underscore the internal consistency of our latent variables. In conclusion, these GoF indicators provided strong support for

the validity and appropriateness of our CFA model, reinforcing its suitability for subsequent SEM analysis.

CFA analysis

Before doing CFA, a thorough assessment of composite/construct reliability was undertaken, employing discriminant and convergent validity as crucial measurement tools. Additionally, parameters such as the average variance extracted (AVE), main loadings (correlations), and construct reliability played key roles in this assessment (Table 3).

Construct reliability measures consumer responses, while convergent validity gauges the means. In the context of this study, AVE values exceeding or equal to 0.5 and construct reliability values surpassing or equal to 0.6 are considered acceptable benchmarks. The results of our analysis reveal AVEs ranging from 0.74 to 0.81 and construct reliability values from 0.94 to 0.96, indicating robust convergent validity.

Moreover, established guidelines propose that standardized loadings should be sufficiently high and statistically significant (acceptable $\geq .50$ /excellent $\geq .707$) (Pimdee, 2020). Each latent variable is expected to have at least three indicators (each has five). Gratifyingly, our analysis exceeds these criteria significantly, further affirming the model's suitability for SEM analysis (Table 3).

Table 3: Latent and observed variable's reliability testing

Latent variables	α	AVE	CR	Observed variables	loading	R ²
Perceived Quality (PER)	0.97	0.74	0.94	PER1 - Overall Quality	0.91	0.82
				PER2 - Trustworthiness	0.87	0.76
				PER3 - Customer-Focused Product Quality	0.80	0.64
				PER4 - Superior Quality	0.87	0.76
				PER5 - Customer Expectations	0.86	0.74
Marketing Mix (MAR)	0.95	0.81	0.96	MAR1 - Product Attributes	0.88	0.78
				MAR2 - Affordability	0.92	0.85
				MAR3 - Employee Competence	0.92	0.85
				MAR4 - Sales Promotion	0.89	0.80
				MAR5 - Distribution Channels	0.89	0.79
Customer Satisfaction (CUS)	0.94	0.76	0.94	CUS1 - Total Satisfaction	0.81	0.65
				CUS2 - Brand Trust	0.90	0.82
				CUS3 - Prompt Service	0.86	0.73
				CUS4 - Purchasing Decisions	0.92	0.84
				CUS5 - Perceived Benefits	0.86	0.75
Brand Attitude (BRA)	0.97	0.77	0.94	BRA1 - Likability	0.90	0.81
				BRA2 - Advertising	0.89	0.80
				BRA3 - Customer Behavior	0.89	0.79
				BRA4 - Knowledge and Understanding	0.82	0.68
				BRA5 - Positive Attitude	0.87	0.77

Data analysis results

Table 4 details the correlation coefficients testing results between latent variables, with the strongest interrelationship pair being PER to BRA (.91, $**p \leq .01$). This indicates that consumer-perceived quality plays an important role in an organic skincare consumer's brand attitude.

Further examination of the skewness (-0.86 to -1.03) and kurtosis (.07 to 1.30) values shows that all values are within acceptable parameters. Binheem et al. (2021) is one study of many that state skewness should be $\leq |2|$ and kurtosis $\leq |7|$. Finally, all interrelationships were statistically significant ($p \leq .01$).

Table 4: Correlation coefficients between latent variables.

Latent variables	Mean	SD	Skew	Kurt	PER	BRA	MAR	CUS
Perceived Quality (PER)	5.65	.98	-.86	.07	1.00	.91*	.82**	.85**
Brand Attitude (BRA)	5.71	.96	-.97	.59		1.00	.86**	.90**

Marketing Mix (MAR)	5.75	.91	-1.03	1.30			1.00	.90**
Customer Satisfaction (CUS)	5.75	.89	-1.00	.97				1.00

Note: **Sig. \leq .01, SD=standard deviation, Skew=skewness, Kurt=kurtosis

SEM analysis and key findings

The SEM analysis using LISREL 9.1 yielded noteworthy insights into the relationships among the variables under scrutiny (Table 5). It was discerned that all the causal factors positively influenced brand attitude (BRA), collectively elucidating 93% of the shared variance in the factors affecting BRA (R^2).

Delving into the total effect (TE) values, the ranked significance indicated that Perceived Quality (PER), Customer Satisfaction (CUS), and Marketing Mix (MAR) played pivotal roles, with TE values of 0.97, 0.37, and 0.35, respectively. This implies that PER had the most substantial overall impact on BRA, followed by CUS and MAR.

Moreover, exploring the interplay between variables, notable strength was observed in the relationships. The TE values highlighted a significant influence between CUS and PER, with a value of 0.94, underscoring the strong connection between these two constructs. Similarly, a robust association was noted between MAR and PER with a TE value of 0.89, emphasizing their interconnected influence.

In summary, the SEM analysis affirmed the positive impact of all causal factors on brand attitude. It provided nuanced insights into the relative significance of PER, customer satisfaction, and the MAR in shaping consumers' brand attitudes.

Table 5: Standardized coefficients of effect in the SEM

Dependent variables	R^2	Effect	Independent variables		
			PER	MAR	CUS
Marketing Mix (MAR)	.79	DE	0.89**		
		IE	-		
		TE	0.89**		
Customer Satisfaction (CUS)	.88	DE	0.46**	0.54**	
		IE	0.48**		
		TE	0.94**	0.54**	
Brand Attitude (BRA)	.93	DE	0.49**	0.15*	0.37**
		IE	0.48**	0.20**	-
		TE	0.97**	0.35**	0.37**

Note: *Sig. \leq .05, **Sig. \leq .01, DE=direct effect, IE=indirect effect, TE=total effect

Table 6 and Figure 1 present the study's hypotheses testing results, providing valuable insights into the relationships between different constructs.

H1: The results indicate a significant and positive direct influence of perceived quality on customer satisfaction, with a coefficient of 0.46. This supports the hypothesis that as perceived quality increases, customer satisfaction also increases.

H2: The findings strongly support the hypothesis that perceived quality has a substantial and positive direct impact on the marketing mix, as evidenced by the high coefficient of 0.89.

H3: The results affirm that perceived quality directly and positively influences brand attitude, with a coefficient of 0.49. This aligns with the hypothesis that higher perceived quality leads to a more positive brand attitude.

H4: The study indicates a positive significant direct influence of the marketing mix on customer satisfaction, with a coefficient of 0.54, supporting the hypothesis.

H5: While the coefficient is relatively lower, the results support the hypothesis that the marketing mix directly and positively influences brand attitude.

H6: The findings strongly support the hypothesis that customer satisfaction directly and positively impacts brand attitude, with a coefficient of 0.37.

In summary, the study's results support all the conceptualized hypotheses, emphasizing the interconnected nature of perceived quality, marketing mix, customer satisfaction, and brand attitude in influencing consumers' perceptions and attitudes.

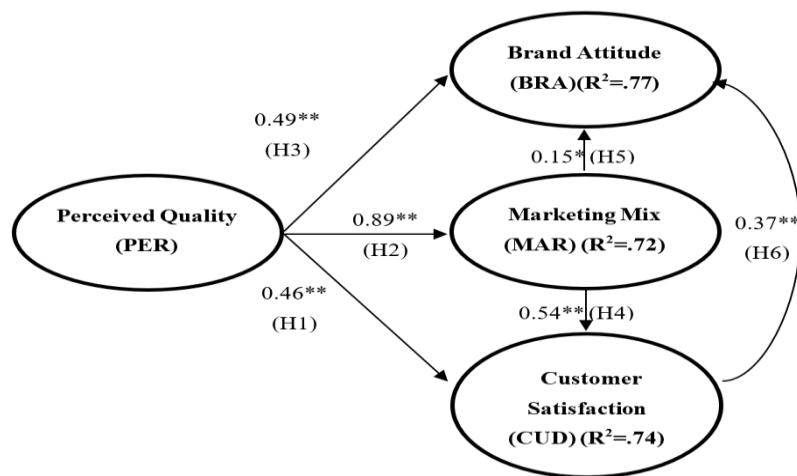


Figure 2: Structural equation model of variables influencing organics skincare customer's brand attitude

Note: H1 – H6 are detailed in Table 6. **Sig. ≤ .01.

DISCUSSION

Table 6 details the descriptive statistics results from both the latent variables and the observed variables. This data is then used as the foundation for the following discussions about the constructs and their indicators.

Table 6: Descriptive statistics analysis results

Latent and observed variables	Mean	SD.	Level	Skew.	Kurt.
Perceived Quality (PER)	5.65	.98	6	-.86	.07
PER1 - Overall Quality	5.52	1.09	6	-.69	-.07
PER2 - Trustworthiness	5.72	1.12	6	-.92	.60
PER3 - Customer-Focused Product Quality	5.61	1.06	6	-.58	-.43
PER4 - Superior Quality	5.68	1.06	6	-.75	-.09
PER5 - Customer Expectations	5.76	1.08	6	-.75	-.21
Marketing Mix (MAR)	5.75	.91	6	-1.03	1.30
MAR1 - Product Attributes	5.69	1.00	6	-.87	1.01
MAR2 - Affordability	5.76	1.02	6	-.97	1.18
MAR3 - Employee Competence	5.78	1.04	6	-.99	1.26
MAR4 - Sales Promotion	5.76	.95	6	-.94	1.03
MAR5 - Distribution Channels	5.74	.92	6	-.86	.70
Customer Satisfaction (CUS)	5.75	.89	6	-1.00	.97
CUS1 - Total Satisfaction	5.83	.96	6	-.92	.82
CUS2 - Brand Trust	5.75	.99	6	-.88	.72
CUS3 - Prompt Service	5.75	1.03	6	-1.26	2.15
CUS4 - Purchasing Decisions	5.73	.96	6	-1.05	1.68
CUS5 - Perceived Benefits	5.71	.95	6	-.77	.37
Brand Attitude (BRA)	5.71	.96	6	-.97	.59
BRA1 - Likability	5.78	1.08	6	-.92	.35
BRA2 - Advertising	5.77	1.06	6	-.96	.66
BRA3 - Customer Behavior	5.65	1.05	6	-.82	.27
BRA4 - Knowledge and Understanding	5.68	1.06	6	-.82	.43
BRA5 - Positive Attitude	5.69	1.03	6	-.91	.80

Perceived quality (PER)

The Perceived Quality (PER) construct emerged as a crucial determinant in shaping customers' attitudes toward organic skincare brands. The mean score of 5.65, reflecting a 'mostly agree' sentiment, suggests a generally positive perception. The observed variables, including overall quality (PER1), reliability (PER2), product quality meeting customer needs (PER3), high quality (PER4), and customer expectations (PER5), demonstrated consistently high mean scores, reinforcing the positive sentiment. The skewness and kurtosis values indicate a relatively normal distribution of responses, as discussed in Section 4.4.

Noteworthy relationships:

Overall, customers view the perceived quality of organic skincare products favorably. Reliability and meeting customer needs are particularly strong contributors to perceived quality.

The variance (skewness and kurtosis) in responses is minimal, indicating a consensus among customers regarding perceived quality (Binheem et al., 2021).

These results are similar to the work of Salvioni et al. (2021) conducted in Italy, where it was suggested that customers often purchase cosmetics with the perception that these products contribute to their overall well-being. In Hungary, Amberg and Fogarassy (2019) highlighted that environmentally conscious consumers prioritize knowledge about their health and the environment. This insight predicts a substantial future trend toward adopting natural and environmentally friendly products.

Marketing mix (MAR)

The Marketing Mix (MAR) construct, with a mean score 5.75, signifies a predominantly positive customer perception. The observed variables, such as product role (MAR1), reasonable price (MAR2), employee competencies (MAR3), promotion (MAR4), and distribution channels (MAR5), collectively contribute to the positive evaluation. The descriptive statistics analysis reveals a slightly negatively skewed distribution, suggesting a tendency towards favorable responses.

Noteworthy relationships:

Customers perceive the various elements of the marketing mix positively, with a focus on reasonable pricing and effective distribution channels.

Employee competencies and promotional activities contribute significantly to the overall positive evaluation of the marketing mix.

Despite some variability, the overall sentiment towards the marketing mix is positive.

These findings agree with Khanthong et al. (2020), who reported that *sales promotion* in Thailand plays the most significant role in organic skincare purchase intention.

Customer satisfaction (CUS)

The Customer Satisfaction (CUS) construct yielded a mean score of 5.75, indicating a high level of satisfaction among customers. Observed variables, including Overall Satisfaction (CUS1), Trust in Brands (CUS2), Fast Service (CUS3), Purchasing Decision (CUS4), and Benefits Received (CUS5), contribute to this positive sentiment. The descriptive statistics highlight a slightly negatively skewed distribution, suggesting a tendency towards high satisfaction levels.

Noteworthy relationships:

Customers express overall satisfaction, with trust in brands and fast service playing pivotal roles.

The distribution of responses indicates a consensus towards high levels of customer satisfaction.

Purchasing decisions and perceived benefits also significantly contribute to positive customer satisfaction.

These results align with the observations made by Calvo-Porrall et al. (2015), emphasizing the role of consumer trust as a determinant of purchase intention in the skincare industry. Similarly, Jinying

(2019) has echoed the significance of brand trust, specifically in the context of the organic skincare sector.

In the Vietnamese market, Nguyen (2020) explored the impact of online shopping for cosmetic and beauty products on customer satisfaction (CUS). The study identified five key influencers, encompassing the consumer's overall experience, the quality of customer service, external incentives, privacy and security considerations, and individual characteristics.

Brand attitude (BRA)

Brand Attitude (BRA) emerges as a critical outcome, with a mean score of 5.71, indicating a positive attitude among customers. Observed variables, including Favorite (BRA1), Advertising (BRA2), Customer Behavior (BRA3), Cognition (BRA4), and Positive Attitude (BRA5), collectively shape customers' brand attitudes. The descriptive statistics show a slightly negatively skewed distribution, suggesting a prevailing positive sentiment.

Noteworthy relationships:

Customers exhibit a positive attitude towards organic skincare brands, with advertising and favorable customer behavior playing significant roles.

Despite the variability, the overall sentiment towards brand attitude is positive.

These results align with the outcomes of a study conducted by Sanny et al. (2020) in Indonesia, focusing on male skincare products. The research revealed that purchase intention was contingent on social media engagement, brand image, and trust. Similarly, Filieri et al. (2023) delved into the realm of online mega-influencers in the cosmetic and beauty industry. Their investigation highlighted that the impact on consumers' purchase intention and brand attitude is exclusive to influencers perceived as genuine and forthright.

The study's findings reveal a positive and interconnected relationship between perceived quality, marketing mix, customer satisfaction, and brand attitude. Customers express satisfaction with the perceived quality of products, marketing efforts, and overall experiences, leading to a positive brand attitude. The nuanced relationships unveiled in this discussion underscore the complexity of factors influencing customers' perceptions and attitudes in the organic skincare industry.

CONCLUSION

Our exploration into the structural equation model has unearthed valuable insights into organic skincare, where perceptions intertwine with product efficacy and marketing allure. The holistic perspective encompassing perceived quality, the marketing mix, customer satisfaction, and brand attitude unraveled the intricate dynamics shaping consumers' perceptions.

The overarching conclusion is that customers in the organic skincare market exhibit a harmonious interplay of positive sentiments. Perceived quality, marked by reliability, meeting customer needs, and exceeding expectations, lays the foundation for favorable brand attitudes. The marketing mix complements the positive trajectory with its components of product role, reasonable pricing, competent employees, strategic promotions, and effective distribution channels. Customer satisfaction emerges as a pivotal juncture, influenced by trust, fast service, purchasing decisions, and perceived benefits, ultimately culminating in an affirmative brand attitude.

The statistical analyses and latent variable discussions underscore the nuanced relationships, revealing the individual strengths of these constructs and their interconnected influence on each other. The customer journey, from perceiving the product's quality to experiencing satisfaction and cultivating a positive brand attitude, is a dynamic process intricately woven with various marketing strategies.

As we delve into this comprehensive exploration, it is evident that the success of organic skincare brands lies in delivering high-quality products and orchestrating a seamless blend of marketing strategies that resonate with customer expectations. The positive feedback loop between perceived quality, marketing mix, customer satisfaction, and brand attitude suggests a symbiotic relationship wherein each element reinforces and elevates the others.

The organic skincare industry stands poised for continued growth in a world where ethical considerations, health-conscious decisions, and environmental concerns increasingly influence consumer choices. Our findings contribute not only to the academic discourse surrounding consumer behavior but also offer actionable insights for practitioners in the organic skincare market. Crafting a narrative that aligns perceived quality, strategic marketing, and customer satisfaction can become a potent recipe for cultivating enduring brand attitudes.

This study encapsulates the intricate dance of variables in the organic skincare realm, shedding light on the symphony of factors that compose a positive consumer experience. As the organic skincare industry evolves, understanding and leveraging these dynamics will be instrumental in navigating the competitive landscape and fostering enduring connections with a discerning consumer base.

LIMITATIONS

While our study provides valuable insights into the factors influencing brand attitude in the organic skincare market, it is essential to acknowledge certain limitations that may guide future research endeavors. Our study primarily focused on Thailand's organic skincare market. Future research could extend its scope to encompass diverse cultural contexts and consumer behaviors. Although our sample size aligns with the recommended guidelines for structural equation modeling, a more extensive and diverse sample (international) could enhance the generalizability of the findings. The study's cross-sectional design captures a snapshot of consumer perceptions. Longitudinal studies could offer a more dynamic understanding of how these perceptions evolve.

FUTURE RESEARCH DIRECTIONS

Exploring how cultural nuances impact the relationships between perceived qualities, marketing mix, customer satisfaction, and brand attitude could provide a deeper understanding, especially in diverse global markets. Investigating the influence of digital marketing channels on brand attitude in the organic skincare industry, considering the growing significance of online platforms and social media. A focused exploration into practical strategies for small and medium-sized enterprises (SMEs) within the organic skincare industry could offer tailored insights for businesses with limited resources. Further research could explore the differential impacts of perceived quality, marketing mix, and customer satisfaction across various demographic segments, such as age, gender, and previous skincare usage patterns. As sustainability becomes increasingly central to consumer choices, future studies might assess the impact of eco-friendly practices on brand attitude within the organic skincare sector. By addressing these limitations and venturing into these unexplored avenues, researchers can contribute to a more nuanced and comprehensive understanding of the dynamic interplay between consumer perceptions and brand attitudes in the evolving landscape of organic skincare.

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