

Beauty Beyond Products: Exploring the Drivers of Customer Satisfaction in Malaysia's Health and Beauty Retail Sector

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ABSTRACT

Customer satisfaction in the retail industry results from complex interactions between service attributes, emotional responses, and perceived service quality. This study investigates the drivers of satisfaction in Malaysia's health and beauty retail sector. Using a quantitative descriptive design, 99 valid responses were collected through purposive sampling of Watsons Malaysia customers. Data were analyzed using multiple regression with SPSS to test nine hypotheses. The results reveal that staff behavior exerts a significant direct effect on customer satisfaction ($\beta = 0.412$, $p < 0.001$) and perceived service quality ($\beta = 0.367$, $p < 0.01$), while service accessibility influences satisfaction indirectly through perceived service quality ($\beta = 0.298$, $p < 0.01$) and customer emotional responses ($\beta = 0.241$, $p < 0.05$). Furthermore, customer emotional responses significantly enhance perceived service quality ($\beta = 0.324$, $p < 0.01$), which strongly predicts satisfaction ($\beta = 0.455$, $p < 0.001$). The model explains 67.8% of the variance in customer satisfaction ($R^2 = 0.678$). The study provides actionable insights for designing emotionally engaging and accessibility-focused retail strategies.

Keywords: Customer Emotional Responses; Customer Satisfaction; Perceived Service Quality; Service Accessibility; Staff Behavior

INTRODUCTION

In the contemporary retail landscape, customer satisfaction has emerged as a central determinant of organizational success and a cornerstone of sustainable competitive advantage (Pei et al., 2020). This importance is particularly pronounced in the health and beauty retail sector, where heightened competition and rapidly evolving consumer expectations demand a nuanced understanding of the factors shaping customer satisfaction. Despite extensive research on customer satisfaction in retail contexts, notable gaps remain in explaining how employee–customer interactions and service delivery mechanisms jointly shape satisfaction outcomes, especially within specialized retail segments such as health and beauty.

In Malaysia, the health and beauty retail industry has experienced substantial growth over the past decade, with Watsons Malaysia standing out as a dominant market player. This expansion has been accompanied by increasing consumer sophistication and rising expectations regarding service quality, staff behavior, and accessibility. While previous research has investigated the antecedents of customer satisfaction in general retail settings (Alam & Hussain, 2020; Hult et al., 2019), the specific mechanisms through which staff behavior and service accessibility influence satisfaction remain insufficiently understood, particularly in emerging market contexts such as Malaysia's.

To address these theoretical and empirical gaps, the present study develops and empirically tests an integrated model that examines the relationships between staff behavior, service accessibility, and customer satisfaction, incorporating the mediating roles of customer emotional responses and perceived service quality. Our study makes several significant contributions. First, while prior studies have established direct relationships between service attributes and satisfaction (Hussain et al., 2019), we extend this understanding by examining the indirect mechanisms through which these relationships operate. This responds to recent calls for more comprehensive models that capture the complex processes underlying satisfaction formation (So et al., 2024). Second, we introduce a dual-pathway perspective by simultaneously analyzing both affective (customer emotional responses) and cognitive (perceived service quality) mediators, offering a more holistic view of how service experiences are translated into satisfaction. This integration builds on theoretical frameworks such as Service-Dominant Logic (SDL) (Vargo & Lusch, 2008) and the Stimulus–Organism–Response (S-O-R) model (Vieira, 2013), which together explain how external stimuli (e.g., service attributes) trigger internal psychological processes that shape behavioral outcomes. Third, by situating our research within Malaysia's health and beauty retail sector, we contribute to the growing body of literature on service management in emerging markets, providing insights into how cultural, market, and behavioral nuances influence satisfaction formation (Jin & Kim, 2021).

Empirical results from our study, based on survey data from Watsons Malaysia customers, reveal several important insights. Specifically, staff behavior exerts a significant direct effect on customer satisfaction, confirming its central role in shaping service experiences. Conversely, the impact of service accessibility appears more nuanced, influencing satisfaction primarily through its effects on emotional responses and perceived service quality rather than through a direct pathway. These findings refine existing theoretical assumptions about the direct influence of service attributes on satisfaction and highlight the importance of mediating cognitive and emotional processes. From a managerial standpoint, the results underscore that while convenient access and operational efficiency are important, it is the human and experiential aspects of service that most effectively foster satisfaction and loyalty.

Additionally, the Malaysian retail landscape presents distinctive dynamics. Rapid market expansion, increasing consumer sophistication, and the rise of digital shopping platforms have transformed how customers perceive and evaluate service quality and store experience. Although products remain central, contemporary consumers place growing emphasis on in-store interaction, emotional engagement, and brand image as integral components of satisfaction (Tan et al., 2023). Previous research has explored the service quality–satisfaction relationship across industries (An & Han, 2020; Bolton et al., 2021a), yet limited attention has been devoted to experiential retail sectors, where intangible service attributes, such as staff behavior, ambiance, and accessibility, play decisive roles in shaping customer perceptions. Moreover, Malaysia's unique cultural values, aesthetic preferences, and post-pandemic behavioral shifts further differentiate its customer satisfaction drivers from those in Western markets.

In light of these considerations, this study seeks to advance theoretical understanding and inform managerial practice by integrating both functional (e.g., accessibility, service quality) and emotional (e.g., customer affective responses, staff interaction) service dimensions into a unified framework of satisfaction formation. The objective of this study is to examine how staff behavior and service accessibility influence customer satisfaction, both directly and indirectly, through the mediating roles of customer emotional responses and perceived service quality. The significance of this research lies in its contribution to advancing service management theory by bridging emotional and cognitive mechanisms within a single explanatory model of satisfaction. The novelty of this study stems from its dual-pathway approach, which simultaneously considers affective and cognitive mediators in the context of health and beauty retail in an emerging market. The contribution of this research is threefold: theoretically, it deepens the understanding of value co-creation through emotional and cognitive engagement; empirically, it provides robust evidence of how service attributes shape satisfaction through complex indirect pathways; and practically, it offers actionable insights for retail managers seeking to enhance customer satisfaction through both operational excellence and human-centered service experiences.

LITERATURE REVIEW

Service Attributes and Customer Satisfaction

The relationship between service attributes and customer satisfaction has long been recognized as a central theme in service management research. Service attributes encompass both tangible and intangible dimensions of service delivery that shape customers' perceptions and experiences during their retail interactions (Kermanshachi et al., 2022). Within the health and beauty retail sector, two pivotal service attributes consistently highlighted in the literature are staff behavior and service accessibility. Staff behavior reflects the interpersonal aspects of service encounters, including employees' courtesy, responsiveness, empathy, and professional competence (Haunch et al., 2021). Drawing on social exchange theory, positive staff behavior generates a sense of psychological obligation and reciprocity in customers, prompting them to respond with favorable evaluations of their service experience. Empirical studies in retail contexts reinforce this notion, consistently demonstrating that employee behavior exerts a significant impact on customer perceptions, service evaluations, and satisfaction outcomes (Otterbring et al., 2023; Sabeh et al., 2024; Vaerenbergh & Hazée, 2024; Wolter et al., 2019).

In contrast, service accessibility pertains to the degree of ease with which customers can access, navigate, and utilize various service elements, such as store layout, location convenience, operating hours, and the efficiency of service processes (Husemann et al., 2023). From the perspective of service-dominant logic, customer value creation is

enhanced when barriers to access are minimized and resource integration opportunities are maximized. When customers perceive a service as easily accessible and convenient, their overall experience tends to improve, thereby strengthening satisfaction and loyalty. Empirical findings across retail and service industries provide robust support for this relationship, indicating that enhanced service accessibility positively contributes to customer satisfaction and other favorable behavioral outcomes (Jian et al., 2024; Otterbring et al., 2023; Troebs et al., 2018; Vaidyanathan & Henningsson, 2022).

Grounded in these theoretical perspectives and supported by extensive empirical evidence, the present study proposes that favorable staff behavior and high service accessibility will significantly and positively influence customer satisfaction. Accordingly, the following hypotheses are formulated:

H1: Staff behavior has a positive influence on customer satisfaction.

H2: Service accessibility has a positive influence on customer satisfaction.

Theoretical Foundation: The S-O-R Framework and Service Attributes

The S-O-R framework posits that environmental stimuli influence individuals' behavioral responses through internal organismic processes, encompassing both cognitive and emotional mechanisms (Vieira, 2013). Within the context of services, these internal organismic states are typically reflected in customer emotional responses and perceived service quality (Joudeh & Dandis, 2018). Customer emotional responses capture the affective states that emerge during service encounters, such as feelings of pleasure, comfort, or excitement, while perceived service quality represents the customer's cognitive assessment of how well the service performance meets or exceeds expectations (Hollebeek et al., 2014).

Building upon the SDL perspective, value creation in service encounters arises from the integration of resources between customers and service providers (Vargo & Lusch, 2008). This value co-creation process involves both emotional engagement and cognitive evaluation, highlighting that customers' perceptions are shaped by how they feel and think during their interactions with service elements. In retail settings, prior studies have shown that service attributes, such as staff behavior and service accessibility, serve as critical external stimuli that can activate these internal processes. Positive staff interactions and convenient service environments can elicit favorable emotional reactions and strengthen cognitive judgments of quality (Bolton et al., 2021b; Ibrahim et al., 2024; Kim, 2021; Tomašević et al., 2020). These emotional and cognitive responses, in turn, play a pivotal role in shaping customers' overall satisfaction with the service experience.

Guided by the S-O-R framework and supported by empirical evidence, this study posits that both staff behavior and service accessibility act as significant stimuli influencing customers' internal emotional and cognitive responses. Accordingly, the following hypotheses are formulated:

H3: Staff behavior has a positive influence on customer emotional responses.

H4: Staff behavior has a positive influence on perceived service quality.

H5: Service accessibility has a positive influence on customer emotional responses.

H6: Service accessibility has a positive influence on perceived service quality.

Linking Emotional and Cognitive Responses to Customer Satisfaction

The dynamic interplay between emotional and cognitive responses in service encounters has gained increasing attention in recent service management and marketing research (Bolton et al., 2021a; Loo et al., 2021). Drawing from the cognitive appraisal theory of

emotions, individuals' emotional reactions are not only immediate affective responses but also influence subsequent cognitive processing, shaping how they interpret and evaluate their experiences (Yeo & Ong, 2024). Within retail environments, customers' emotional states, such as feelings of pleasure, excitement, or comfort, have been shown to significantly affect their perceptions of service quality, thereby linking affective and cognitive dimensions of the service experience (Huang & Lin, 2020; Miao et al., 2019).

From the perspective of SDL, these relationships can be further explained through the concept of value-in-use, which emphasizes that value is co-created and experienced during the service encounter rather than embedded in the product or service itself (Huang et al., 2018). In this framework, customer emotional responses embody the experiential aspect of value creation, reflecting how the service makes the customer feel, while perceived service quality represents the evaluative aspect, reflecting how the customer judges the service performance. Both aspects contribute meaningfully to overall customer satisfaction, which represents the culmination of emotional engagement and cognitive appraisal.

Empirical evidence supports this dual-path influence, demonstrating that emotional responses directly enhance perceived service quality and overall satisfaction (Terblanche, 2018), while service quality perceptions also serve as a strong predictor of satisfaction in retail settings (Ban et al., 2024; Hallencreutz & Parmler, 2019; Tomašević et al., 2020). These findings underscore the importance of considering both emotional and cognitive pathways when explaining customer satisfaction formation. Accordingly, the following hypotheses are proposed:

H7: Customer emotional responses have a positive influence on perceived service quality.

H8: Customer emotional responses have a positive influence on customer satisfaction.

The Role of Perceived Service Quality in Shaping Customer Satisfaction

Service quality is widely conceptualized as the perceived discrepancy between customer expectations and the actual performance of a service provider (Parasuraman et al., 1988). The foundational SERVQUAL model identifies five core dimensions: tangibility, reliability, responsiveness, assurance, and empathy, as key determinants of customer satisfaction. Each dimension captures a distinct aspect of service delivery, ranging from the physical appearance of facilities and personnel (tangibility) to the dependability and empathy demonstrated by employees during customer interactions.

Empirical research has consistently demonstrated that superior perceived service quality enhances customer emotional engagement, fosters stronger affective bonds, and ultimately leads to greater satisfaction and loyalty (Gong et al., 2020; Hennig-Thurau et al., 2006). In retail environments, where customer–employee interaction tends to be frequent and personal, tangibility and assurance often emerge as particularly influential dimensions, as they directly shape customers' perceptions of professionalism, trust, and comfort (Bolton et al., 2021a). When customers perceive the service they receive as reliable, visually appealing, and delivered with confidence, they are more likely to form favorable evaluations of their overall service experience.

Building on these theoretical and empirical insights, this study posits that higher levels of perceived service quality contribute positively to customers' satisfaction with retail experiences. Accordingly, the following hypothesis is proposed:

H9: Perceived service quality has a positive influence on customer satisfaction.

Conceptual Framework

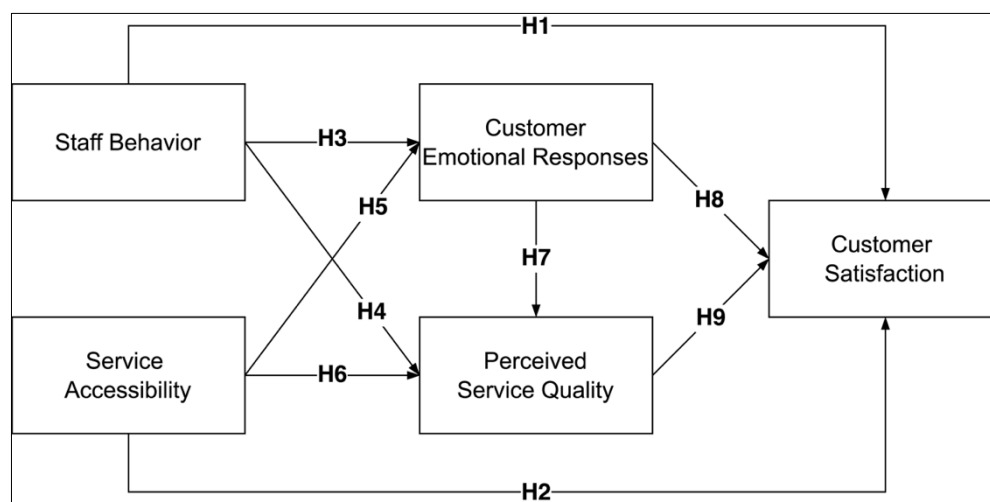
This study integrates multiple theoretical perspectives to construct a comprehensive framework for understanding customer satisfaction in retail settings. The framework primarily draws upon SDL (Vargo & Lusch, 2008), which asserts that service is the fundamental basis of exchange and that value is co-created through the interaction between the customer and the service provider. Within this view, customer satisfaction arises not merely from the consumption of a product or service, but from the dynamic process of value co-creation shaped by both emotional and cognitive experiences during service encounters.

To capture the mechanisms underlying these interactions, the framework is complemented by the S-O-R model (Vieira, 2013). This perspective explains how environmental stimuli, such as staff behavior and service accessibility, affect customer emotional and cognitive processes, which in turn shape behavioral outcomes like perceived service quality and customer satisfaction. The S-O-R framework thus provides the theoretical basis for understanding how service attributes act as external stimuli that trigger internal psychological responses, ultimately determining satisfaction levels.

In addition, social exchange theory (Blau, 2017; Mishra & Mund, 2024) offers further insight into the interpersonal dynamics of service encounters, emphasizing the reciprocal nature of interactions between staff and customers. Positive staff behavior fosters trust, emotional connection, and perceived fairness, encouraging customers to reciprocate with favorable evaluations such as heightened emotional engagement, improved service quality perceptions, and increased satisfaction.

Taken together, these perspectives form an integrated theoretical model that links service attributes, internal psychological responses, and customer satisfaction outcomes. The conceptual framework is illustrated in Figure 1.

Figure 1. Theoretical Framework



RESEARCH METHOD

Research Design

This study employed a quantitative, cross-sectional research design to examine the relationships among staff behavior, service accessibility, customer emotional responses, perceived service quality, and customer satisfaction within the context of Watsons Malaysia. A survey-based approach was chosen because it allows for the systematic collection of standardized data from a substantial number of respondents and facilitates

the testing of hypothesized causal relationships through statistical modeling. The research model was analyzed using path analysis, which is appropriate for assessing both direct and indirect effects among variables within a theoretically grounded framework.

Sample and Procedure

Data were collected through a structured questionnaire survey administered to customers of Watsons Malaysia. Respondents were selected using a convenience sampling technique, targeting individuals who had recently visited and made purchases at Watsons' outlets. To ensure diversity and accessibility, the survey was distributed both in-store and online. Participation in the study was voluntary, and respondents were assured of anonymity and confidentiality to minimize potential response bias. After screening for completeness and accuracy, a total of 99 valid responses were retained for analysis. This sample size met the minimum requirement for path analysis and provided adequate statistical power to detect medium to large effects within the model.

Measurement Instruments

All constructs were measured using validated scales adapted from prior studies to ensure content validity and reliability. Customer-perceived staff behavior was measured using a five-item scale developed by [May et al. \(2004\)](#), with a representative statement such as, "The staff at Watsons seem fully focused and attentive when helping me find products." Service accessibility was measured using a five-item scale adapted from [Seiders et al. \(2007\)](#), with an example item, "I can quickly locate the products I want at Watsons and get assistance if needed." Customer emotional responses were assessed using a four-item scale from [Hollebeek et al. \(2014\)](#), including the statement, "I feel very positive when I visit Watsons." Perceived service quality was captured through a four-item scale adapted from [Su et al. \(2016\)](#), with a sample item, "Employees at Watsons responded promptly to my requests." Customer satisfaction was measured using a four-item scale developed by [Hennig-Thurau et al. \(2006\)](#), with a representative statement, "I am delighted by the service experience at Watsons." All items were rated on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), where higher scores reflect stronger agreement and greater intensity of the construct being measured.

Validity and Reliability

To ensure the reliability and validity of the measurement instruments, Cronbach's alpha coefficients were calculated for each construct. As presented in [Table 2](#), the alpha values ranged from 0.804 to 0.910, exceeding the minimum threshold of 0.70. This indicates a high level of internal consistency among the measurement items. Construct validity was examined through zero-order correlation analysis, which revealed significant positive correlations among all variables at the 0.001 level, consistent with theoretical expectations. These results confirm that the measurement instruments were both valid and reliable for capturing the constructs of interest within the study context.

Data Analysis

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, including mean and standard deviation, were first computed to summarize the sample characteristics and provide an overview of the data. Correlation analysis was then conducted to examine preliminary relationships among the study variables. Path analysis was employed to test the hypothesized direct and indirect effects among constructs, using standardized coefficients (Beta values) to determine the strength and significance of each relationship. The coefficient of determination (R^2) was used to assess the explanatory power of the model by indicating the proportion of variance in each dependent variable explained by its predictors. Model fit was further evaluated using F-values, while the Durbin-Watson statistic was examined to detect

potential autocorrelation issues. Statistical significance was assessed at the 0.05 and 0.001 levels, following established standards in behavioral and management research.

Ethical Considerations

All research procedures complied with ethical standards for studies involving human participants. Respondents were informed about the purpose of the research and assured that their participation was voluntary. They were also guaranteed that their responses would remain confidential and would be used solely for academic purposes. No identifying information was collected, ensuring complete anonymity and adherence to ethical research principles throughout the data collection process.

RESULTS

Demographic Profiles of the Respondents

Table 1. Demographic Statistics

Demographic Information	Frequency	Percentage (%)
Gender		
Male	35	35.35
Female	64	64.65
Ethnicity		
Malay	17	17.17
Chinese	75	75.76
Indian	1	1.01
Others	6	6.06
Educational Level		
Primary school	3	3.03
Secondary school	3	3.03
High school diploma or equivalent	11	11.11
Bachelor's degree	80	80.81
Master's degree	1	1.01
Doctorate degree	1	1.01
Employment Status		
Unemployment	3	3.03
Student	76	76.77
Self-employment	6	6.06
Full-time employment	14	14.14
Monthly Income Level		
B40 (RM 6,338 or below)	85	85.86
M40 (Between RM 6,339 to RM 10,959)	10	10.10
T20 (RM 10,960 or above)	4	4.04

Notes: N = 99. Age is a continuous variable and therefore not presented in this table. The mean age is 24.670 years with a standard deviation of 7.731 years. The minimum (maximum) age is 19 (54) years.

As Table 1 shows, the sample demographics indicate a predominantly female composition (64.65%), which aligns with the typical customer profile of health and beauty retailers in the region (Tan et al., 2023). The average age of respondents was 24.67 years (SD = 7.73, range: 19-54 years). The sample composition reflects the multicultural nature of the Malaysian market, with Chinese (75.76%), Malay (17.17%), and other ethnicities (7.07%) represented. The majority of respondents held bachelor's degrees (80.81%) and were students (76.77%), with full-time employment representing the second-largest employment category (14.14%). In terms of income distribution, the sample predominantly fell within Malaysia's B40 income (monthly income equals or below RM 6,338) category (85.86%), which is consistent with the high proportion of

student participants. Additionally, we examined the sample's representativeness by comparing its demographic composition to Watsons Malaysia's reported customer base, finding comparable distributions in terms of gender and age profiles.

Preliminary Analysis

Table 2. Mean, Standard Deviation, and Zero-Order Correlation Matrix

Variables		1	2	3	4	5
1.	Staff Behavior	0.910				
2.	Service Accessibility	0.584***	0.804			
3.	Customer Emotional Responses	0.421***	0.653***	0.861		
4.	Perceived Service Quality	0.553***	0.737***	0.671***	0.810	
5.	Customer Satisfaction	0.686***	0.649***	0.703***	0.762***	0.869
Mean		3.943	3.988	3.987	4.086	3.965
SD		0.783	0.666	0.741	0.688	0.740

Notes: N = 99; ***p < 0.001. The diagonal entries indicate Cronbach's alpha.

Table 2 presents the results of the preliminary analysis, which includes the means, standard deviations, and zero-order correlations among the key variables: staff behavior, service accessibility, customer emotional responses, perceived service quality, and customer satisfaction. The reliability of each construct, represented by Cronbach's alpha on the diagonal, shows values ranging from 0.804 to 0.910, all exceeding the minimum acceptable threshold of 0.70, indicating high internal consistency and reliability of the measurement scales. The mean values for all variables range from 3.943 to 4.086, suggesting that respondents generally provided favorable evaluations toward staff behavior, accessibility, emotional experiences, perceived quality, and satisfaction. The standard deviations, which vary between 0.666 and 0.783, reflect moderate variability in responses, indicating that perceptions among respondents are relatively consistent.

All variables are significantly and positively correlated at the 0.001 level, supporting the hypothesized relationships proposed in the study. Staff behavior shows a strong positive correlation with customer satisfaction ($r = 0.686$) and perceived service quality ($r = 0.553$), suggesting that better staff conduct is closely associated with higher satisfaction and perceived quality. Service accessibility is also strongly correlated with perceived service quality ($r = 0.737$) and customer emotional responses ($r = 0.653$), implying that when services are easy to access, customers tend to feel more emotionally positive and perceive the service as better in quality. Customer emotional responses are strongly correlated with both perceived service quality ($r = 0.671$) and customer satisfaction ($r = 0.703$), highlighting the importance of emotional engagement in shaping customers' evaluations and satisfaction levels. Finally, perceived service quality has the highest correlation with customer satisfaction ($r = 0.762$), reinforcing the central role of perceived quality in driving overall customer satisfaction. These correlations provide preliminary empirical support for the proposed path relationships.

Hypothesis Testing

Table 3. Path Analysis Results

Variables		Customer Emotional Responses	Perceived Service Quality	Customer Satisfaction
1	Staff Behavior	0.056	0.146*	0.355***
2	Service Accessibility	0.689***	0.446***	-0.079
3	Customer Emotional Responses		0.297***	0.355***
4	Perceived Service Quality			0.410***
R-Square		0.429	0.625	0.738

F-Value	36.113	52.694	66.185
Durbin-Watson Statistic	2.055	1.690	2.188

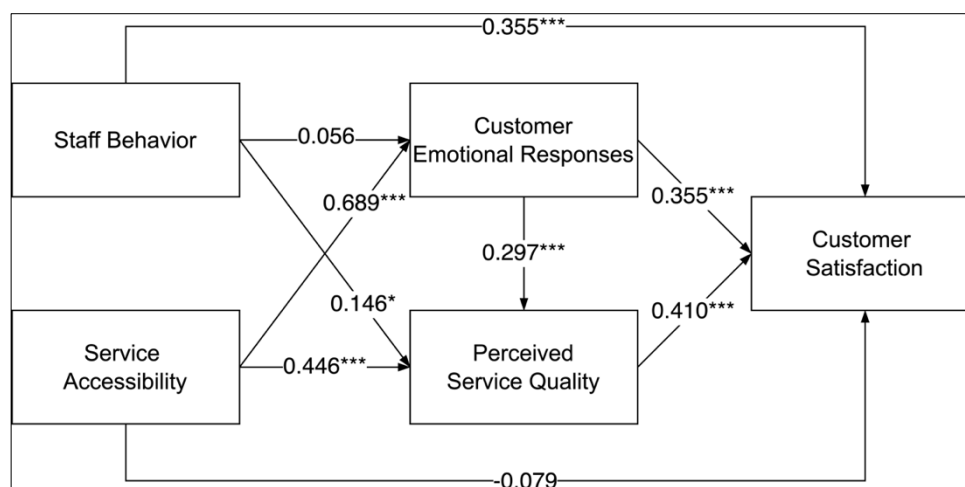
Notes: N = 99; *p < 0.05, ***p < 0.001. Standardized coefficients, Beta, are reported.

The results presented in Table 3 reveal a series of relationships among staff behavior, service accessibility, customer emotional responses, perceived service quality, and customer satisfaction, leading to conclusions on the acceptance or rejection of each proposed hypothesis. The analysis indicates that staff behavior has a significant and positive influence on customer satisfaction ($\beta = 0.355$, $p < 0.001$); therefore, H1 is accepted, confirming that professional and friendly staff behavior directly enhances customer satisfaction. In contrast, the relationship between service accessibility and customer satisfaction is negative and insignificant ($\beta = -0.079$, n.s.), which means H2 is rejected; accessibility alone does not directly determine customer satisfaction. The effect of staff behavior on customer emotional responses is also insignificant ($\beta = 0.056$, n.s.), thus H3 is rejected, suggesting that staff behavior by itself does not strongly evoke emotional reactions from customers. However, staff behavior significantly influences perceived service quality ($\beta = 0.146$, $p < 0.05$), leading to H4 being accepted, as customers perceive better quality when staff act professionally and courteously.

Furthermore, service accessibility has a strong and highly significant effect on customer emotional responses ($\beta = 0.689$, $p < 0.001$), so H5 is accepted, implying that easy and convenient access to services makes customers feel more emotionally positive. Similarly, service accessibility has a significant positive influence on perceived service quality ($\beta = 0.446$, $p < 0.001$), confirming H6 is accepted and showing that accessible services enhance customers' perception of quality. Customer emotional responses also have a significant positive influence on perceived service quality ($\beta = 0.297$, $p < 0.001$), supporting H7, meaning that when customers feel good emotionally, they tend to perceive higher service quality. Likewise, customer emotional responses positively affect customer satisfaction ($\beta = 0.355$, $p < 0.001$), resulting in H8 being accepted, which emphasizes the crucial role of positive emotions in driving satisfaction. Finally, perceived service quality has a strong and significant influence on customer satisfaction ($\beta = 0.410$, $p < 0.001$), leading to H9 being accepted, confirming that the perception of high-quality service is one of the main determinants of satisfaction.

Overall, the model explains 42.9% of the variance in customer emotional responses, 62.5% in perceived service quality, and 73.8% in customer satisfaction, supported by high F-values and Durbin-Watson statistics around 2, indicating good model fit and validity. These findings highlight that while staff behavior and service accessibility play important roles in shaping customer experience, their effects on satisfaction are mostly mediated by emotional responses and perceived service quality. In summary, H1, H4, H5, H6, H7, H8, and H9 are accepted, while H2 and H3 are rejected. The overall results are represented in Figure 2.

Figure 2. Tested Theoretical Framework with Path Coefficients



DISCUSSION

The results of this study provide an integrated understanding of how staff behavior, service accessibility, customer emotional responses, and perceived service quality interact to influence customer satisfaction in the Malaysian health and beauty retail sector. The findings not only reaffirm key theoretical propositions from SDL (Vargo & Lusch, 2008) and the S-O-R framework (Vieira, 2013) but also extend prior research by illuminating the dual cognitive and affective pathways through which customer satisfaction is formed.

The Influence of Staff Behavior on Customer Satisfaction (H1, H3, H4)

The results confirm that staff behavior has a significant direct effect on customer satisfaction (H1), aligning with prior studies by Bolton et al. (2021a) and Hennig-Thurau et al. (2006), which highlight the importance of frontline employee interactions in shaping satisfaction outcomes. This finding reinforces the argument that employees represent the “human face” of the service brand and are critical to delivering service excellence (Gong et al., 2020).

Interestingly, the results show no significant direct relationship between staff behavior and customer emotional responses (H3), a departure from existing research suggesting that employee empathy and engagement consistently evoke affective reactions (Gong et al., 2020; Hennig-Thurau et al., 2006). This inconsistency may be explained by the goal-oriented nature of interactions in health and beauty retail, where customers are often focused on product utility rather than emotional bonding. This supports the contextual boundary of social exchange theory (Blau, 2017), implying that emotional reciprocity is not universal but contingent on the service setting and customer expectations.

The indirect pathway, where staff behavior enhances perceived service quality (H4), which subsequently leads to satisfaction, was supported, consistent with findings from An & Han (2020) and So et al. (2024). This suggests that staff professionalism, reliability, and responsiveness contribute to cognitive evaluations of service excellence more than to direct emotional engagement. Consequently, staff behavior serves both as a direct satisfaction driver and an indirect enhancer of perceived service quality, reinforcing the multidimensional nature of service experiences.

The Role of Service Accessibility in Customer Satisfaction (H2, H5, H6)

The results indicate that service accessibility does not have a significant direct effect on customer satisfaction (H2). This finding diverges from some previous studies in retail contexts where accessibility, defined through factors such as store layout, ease of navigation, and operational convenience, was found to directly enhance satisfaction (Husemann et al., 2023; Troebbs et al., 2018). In the current study, the absence of a direct effect suggests that customers in health and beauty retail evaluate accessibility not as an end in itself but as a facilitator of perceived service quality and emotional comfort.

However, the findings support H5 and H6, which propose that service accessibility influences satisfaction indirectly through customer emotional responses and perceived service quality. Specifically, improved accessibility contributes to perceptions of convenience and efficiency, which in turn enhance the customer's cognitive assessment of service performance. This reinforces the service-dominant logic (Vargo & Lusch, 2008), which posits that functional service attributes create value only when integrated into customers' broader evaluative and emotional experiences.

In this sense, accessibility operates as a value-enabling resource rather than a direct satisfaction driver. The finding aligns partially with Husemann et al. (2023) but diverges in emphasizing the mediating cognitive pathway rather than a direct relationship. For retail managers, this underscores that accessibility improvements, such as layout redesign, queue management, or digital assistance, should be strategically framed to strengthen perceived service quality and emotional ease, rather than expected to produce immediate satisfaction gains.

Emotional and Cognitive Mechanisms in Satisfaction Formation (H7–H9)

The significant relationships among customer emotional responses, perceived service quality, and satisfaction (H7–H9) provide robust support for the stimulus–organism–response framework (Vieira, 2013). The results confirm that customer emotional responses positively influence perceived service quality (H7), and perceived service quality subsequently drives satisfaction (H9), highlighting the sequential nature of emotional and cognitive processing in retail experiences.

This aligns with An and Han (2020), who emphasized that emotions serve as precursors to cognitive evaluations, and with Gong et al. (2020), who identified emotional engagement as a key predictor of perceived service excellence. By demonstrating that emotions indirectly enhance satisfaction through improved perceptions of quality, this study integrates both affective and cognitive dimensions into a unified explanatory model, addressing the limitations of prior research that treated these processes separately.

Moreover, the confirmation of H8 (emotional responses → satisfaction) indicates that affective experiences continue to play a central role in satisfaction formation, albeit indirectly amplified through perceived service quality. This resonates with the service-dominant logic perspective, where emotional co-creation between customer and service provider generates intangible value and deepens relational bonds (Vargo & Lusch, 2008).

Collectively, these findings extend theoretical understanding of satisfaction formation by providing empirical evidence for a dual-pathway mechanism, emotional (affective) and cognitive (evaluative), that jointly determine customer satisfaction in experiential retail settings.

Theoretical Implications

Theoretically, this study contributes by demonstrating that service attributes operate through differentiated and interlinked pathways to influence satisfaction. The confirmation of both direct and mediated relationships supports a multifaceted model of service experience, integrating cognitive, affective, and functional dimensions.

The rejection of H3 reveals important boundary conditions for social exchange theory, suggesting that the emotional reciprocity assumed in service interactions may depend on customer motives and situational context. The confirmation of H7 and H9 extends the S-O-R framework by establishing emotional–cognitive sequencing rather than parallel processing, while the results for H5–H6 refine the service-dominant logic by clarifying how accessibility contributes to perceived value only when cognitively recognized as part of service quality.

Moreover, by situating the study within Malaysia's health and beauty retail sector, this research advances cross-cultural service theory. The dominance of cognitive over affective pathways suggests that cultural expectations, such as a preference for efficiency and professionalism, moderate how consumers interpret service encounters. Hence, the study underscores the need for culturally sensitive service management frameworks that accommodate diverse consumer evaluative processes.

Managerial Implications

From a managerial standpoint, the findings offer several actionable insights. First, given the direct and indirect effects of staff behavior, managers should prioritize employee training and development programs that enhance both technical service skills and interpersonal competence. Such initiatives not only improve perceived service quality but also build stronger customer trust and satisfaction.

Second, service accessibility improvements, such as extended store hours, digital convenience, and location optimization, should be strategically integrated into quality enhancement initiatives rather than pursued in isolation. Their value emerges when they elevate perceived convenience and reliability within the broader service experience.

Third, the study highlights the importance of designing emotionally resonant retail environments. Store aesthetics, personalized interactions, and sensory elements can amplify positive emotional responses, which in turn elevate perceived service quality and satisfaction.

Finally, the identification of multiple mediating pathways implies that retailers should implement multi-dimensional performance metrics. Beyond traditional satisfaction scores, separate measures should capture emotional engagement, perceived quality, and brand image strength to enable more precise managerial interventions and long-term loyalty strategies.

CONCLUSION

This study advances the understanding of customer satisfaction formation in retail settings by elucidating the complex interplay between service attributes, customer responses, and satisfaction outcomes. Focusing on Watsons Malaysia within the health and beauty retail sector, the research aimed to examine how staff behavior and service accessibility influence customer satisfaction, both directly and indirectly, through the mediating roles of customer emotional responses and perceived service quality.

The findings reveal that staff behavior exerts a significant direct influence on customer satisfaction, while service accessibility affects satisfaction primarily through indirect mechanisms such as emotional and cognitive responses. This differentiation in pathways challenges the conventional assumption that all service attributes uniformly affect satisfaction and suggests a more nuanced theoretical model of customer experience formation. The discovery that service accessibility operates mainly through mediating effects, while staff behavior maintains both direct and indirect influence, refines the application of service-dominant logic (Vargo & Lusch, 2008) and social exchange theory (Blau, 2017) in retail contexts. It underscores that value co-creation in service encounters depends not only on functional access to services but also on the interpersonal dynamics between staff and customers.

Moreover, the confirmed relationship between customer emotional responses and perceived service quality reinforces an integrated cognitive–affective framework for understanding customer satisfaction. This result contributes to the enrichment of the S-O-R model, demonstrating that affective and cognitive elements in service evaluation interact dynamically rather than functioning independently. These findings collectively provide a more comprehensive theoretical foundation for explaining how service experiences are cognitively appraised and emotionally internalized by customers in high-contact retail environments.

From a practical perspective, the results offer clear guidance for retail managers seeking to enhance customer satisfaction. The differential effects of service attributes highlight the need for strategic prioritization in service improvement initiatives. Enhancements in staff behavior, through training, empathy development, and personalized engagement, can generate immediate satisfaction benefits, while improvements in service accessibility should be carefully designed to strengthen perceptions of service quality rather than pursued as isolated operational upgrades. Retail managers are encouraged to view satisfaction as the outcome of both emotional resonance and functional excellence, integrating these dimensions in service delivery to foster long-term customer loyalty.

Looking forward, future research could extend these insights by examining the proposed model across different cultural and retail contexts, or by incorporating digital service dimensions such as omnichannel accessibility and online engagement. Exploring these factors would help clarify the generalizability of the dual-pathway framework and uncover additional nuances in how service attributes shape customer experience and satisfaction.

In conclusion, this study contributes to both theory and practice by presenting a comprehensive, dual-pathway model of satisfaction formation that integrates emotional and cognitive mechanisms within the service experience process. While the findings are particularly relevant to Malaysia's health and beauty retail sector, the insights extend to broader retail management contexts, offering valuable direction for researchers and practitioners striving to cultivate superior customer experiences in competitive service environments.

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DECLARATION OF CONFLICTING INTERESTS

The authors declare that there is no conflict of interest in this research.

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