

Impact of restaurant atmosphere on revisit intention via perceived quality and word of mouth in Vietnam



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ARTICLE INFO

Article history:

Received 5 April 2025

Received in revised form

11 August 2025

Accepted 11 October 2025

Keywords:

Atmospheric factors

Perceived quality

Word of mouth

Revisit intention

Servicescape

ABSTRACT

This study examines how atmospheric factors affect perceived quality, guest word of mouth (WOM), and revisit intention in Vietnamese restaurants. Based on the Stimulus–Organism–Response (S-O-R) model and the Servicescape framework, it emphasizes the influence of the physical environment on customer behavior. Data were collected through a survey of 250 local and international restaurant guests and analyzed using PLS-SEM. Results show that external facilities and interior design significantly influence perceived quality and WOM, particularly through features such as the façade, signage, ambiance, and furnishings. In contrast, the restaurant layout does not directly affect perceived quality and has only a limited effect on WOM. The findings also confirm that perceived quality strongly promotes revisit intention, while WOM is the most influential factor. These results suggest that restaurant managers should carefully design and manage atmospheric elements to improve guest experiences, encourage positive WOM, and strengthen long-term customer loyalty.

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1. Introduction

The concept of atmospherics has been a point of concern among researchers on the decision-making activities of consumers in various consumption environments, including restaurants (Khan et al., 2023; Pezenka and Weismayer, 2020). Atmospherics can broadly be described as the sensory elements that shape customers' experiences and perceptions in an actual environment. Atmosphere in restaurants, such as lighting, music, design, and scent, creates a lifelike environment that not only attracts customers but also shapes their decision concerning the service quality and their future behavioral intentions.

However, despite its importance, the study of atmosphere with various theoretical and empirical issues. Scholars have described atmospheres as volatile by nature, constantly changing, and difficult to define (Biehl-Missal and Saren, 2012). This indeterminacy is because atmospheric qualities evoke subjective sensorial and emotional responses,

which vary across individuals and contexts (Nunes de Vasconcelos and Rolla, 2024; Vanhatalo et al., 2022).

Within the specific context, scholars have also wrestled with the extremely interconnected construct of authenticity, a core theme that organizes consumer experiences. As it is agreed upon that authenticity is a complex construct, the bulk of what has been penned winds up narrowing down to food authenticity (Hoffman et al., 2024; Kim and Song, 2024; Xu et al., 2023). The other critical factors, such as restaurant interior design, service style, cultural cues, and overall ambiance, have been comparatively less studied (Al-Kilani and El Hedhli, 2021; Björk and Kauppinen-Räsänen, 2016; Croitoru et al., 2024). This focused attention overlooks the holistic nature of dining experiences, which are co-created through the blending of food, service, and physical environment (Lin and Mattila, 2010).

The importance of understanding these holistic dining experiences by growing emphasis on customer loyalty within the hospitality sector. Different research articles indicate that retaining loyal customers is less expensive than acquiring new customers. Loyal customers not only spend more, but they are also valuable promoters through positive word of mouth. In restaurants, atmospherics play a central role in shaping the perceptions of quality on which customer satisfaction is founded

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<https://doi.org/10.21833/ijaas.2025.11.005>

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and ultimately determines revisit intention (Ryu and Han, 2011). Aside from promoting loyalty, atmospheric attributes also influence how customers evaluate perceived quality as a crucial factor in determining satisfaction and behavior intentions (Parasuraman et al., 1988). Restaurant perceived quality extends beyond food quality to service quality, ambiance quality, and experiential quality. Thus, the understanding of atmospheric elements' influence on perceived quality reflects a broader perspective toward customer decision-making and revisit behavior. Such a broader perspective is in line with today's changing consumers' expectations for not just quality food but also memorable and engaging eating experiences.

Although much research has been conducted that aims at individual atmospheric factors such as music, lighting, and décor (Mathiesen et al., 2020; Özkul et al., 2020; Roschk et al., 2017; Vigi et al., 2023), there is limited literature on understanding the joint impact of more than one atmospheric factor towards perceived quality, guest word of mouth, and revisit intention in a restaurant. The present research bridges these gaps by creating an integrated model to link restaurant atmospheric attributes, perceived quality, and revisit intention, and hence provides a stronger conceptual framework of customer experience. Placing atmospheric characteristics within the broader construct of perceived quality, this study not only meets these calls but also reveals how atmosphere comes into play in perceived authenticity of dining experiences (Björk and Kauppinen-Räsänen, 2016). This integrative approach is a function of the fact that customers' perceptions of authenticity are not only determined by the quality of food, but also by the alignment between the physical and sensory environment and their expectations (Liu et al., 2017).

Moreover, the contemporary dining environment is evolving at lightning speed because of changes in consumer demands, social networking, and culinary experience culture (Kim and Eves, 2012). Consumers are not longer viewing food as a practical activity; on the contrary, they look for emotionally intense and visually appealing events (Tsai and Men, 2017). This shift demonstrates the importance of atmospheric attributes as strategic differentiators to enhance perceived quality, elicit recall value, and inspire long-term guest loyalty (Ryu and Han, 2011). Consequently, the study aims to contribute to hospitality and service management literature through conceptualizing and empirically testing a theoretical model investigating restaurant atmospheric attributes and their inter-linkages with perceived quality, guests' word of mouth, and revisit intention.

2. Literature review

2.1. Theoretical background

Atmospheric attributes in consumer behavior have, over time, attracted scholarly attention in the

hospitality and retail sectors. Various theories have been utilized in describing how the physical environment organizes perceptions, feelings, and intent to act. Arguably, the most rooted model is Bitner's (1992) Servicescape, with a focus on the fact that the physical environment, through design, space, lighting, odor, and music, influences customers' experience and satisfaction. To explain how environmental stimuli provoke customers' responses, researchers tend to adopt the S-O-R model (Mehrabian and Russell, 1974). These stimuli influence the Organism, which is the customer's internal response, for example, perceived quality and feelings generated from the sensory experience. These internal responses then trigger the Response, which is the behavioral response, such as revisit intention and positive Word of Mouth (WOM) (Han and Ryu, 2009; Ryu and Han, 2011).

2.2. Hypothesis development

2.2.1. Atmospheric attributes and perceived quality

The perceived quality reflects a customer's overall judgment of a product's excellence and differs from actual quality as it encompasses a broader evaluation of the dining experience. Ambient conditions, though often unnoticed, subtly influence customer perception and responses (Özkul et al., 2020). Beyond driving word of mouth, atmospheric elements shape perceived quality by affecting how customers assess service through environmental and sensory cues. The Servicescape framework (Bitner, 1992) emphasizes that service quality is not only determined by performance but also by the physical environment in which it occurs. Perceived quality is thus not only shaped by service performance but also by the surrounding Servicescape, as illustrated in the proposed research model (Fig. 1). External factors like building appeal, signage visibility, cleanliness, and parking availability directly influence quality perceptions (Kim and Bachman, 2019). A clean, welcoming exterior sets high expectations and fosters positive service evaluations (Han and Ryu, 2009). Interior layout enhances perceived quality by shaping ambiance (Muskat et al., 2019), while a comfortable, well-designed space improves guest experience (Ryu et al., 2012). Ease of movement, logical design, and accessible amenities further enhance overall satisfaction (Ahn and Seo, 2018; Ryu et al., 2012). Together, these elements create a seamless sensory experience, signaling quality service (Vos et al., 2019). From these findings, the hypotheses are formulated as follows:

H1a: Atmospheric as external facilities to perceived quality.

H1b: Atmospheric as interior layout to perceived quality.

H1c: Atmospheric as restaurant layout to perceived quality.

2.2.2. Atmospheric attributes and guest word of mouth

Atmospheric features encompass the physical and sensory elements of a restaurant that shape guest perception, experience, and discussion (Bitner, 1992). These include exterior surroundings, interior design, and overall layout, which together create ambiance. External factors like building appearance, signage, parking, and cleanliness form first impressions that can drive word of mouth (Choi and Kandampully, 2019; Jalilvand et al., 2017; Loureiro and Silva, 2021; Usiña-Báscones et al., 2024). A well-maintained, aesthetically pleasing exterior fosters positive attitudes, encouraging guests to share their experiences. Next, interior design elements like seating, table spacing, lighting, color, decor, and music shape customers' emotional connections to a restaurant (Chao et al., 2021; Chun and Nyam-Ochir, 2020). Both aesthetic and functional designs evoke positive emotions, encouraging patrons to recommend the restaurant online (Jeong and Jang, 2011). Layout, including entrances, seating, service areas, and restrooms, also influences word of mouth. A spacious, convenient, and comfortable design increases the likelihood of customer advocacy (Lin and Mattila, 2010). This connection between atmosphere and customer behavior aligns with the Servicescape paradigm (Chao et al., 2021). From these findings, the hypotheses are formulated as follows:

H2a: Atmospheric as external factors positively influence guest word of mouth.

H2b: Atmospheric as interior layout positively influences guest word of mouth.

H3c: Atmospheric as restaurant layout positively influences guest word of mouth.

2.2.3. Perceived quality and revisit intention

Perceived quality is crucial in shaping customer decisions and behavior in the hospitality industry. It results from comparing service or product performance with expectations (Calvo-Porrá and Lévy-Mangin, 2017). When food quality, environment, and service meet or exceed expectations, customers feel satisfied, fostering loyalty and repeat visits (Konuk, 2019; Mannan et al., 2019; Parasuraman et al., 1988). This makes perceived quality essential for long-term customer engagement, as positive dining experiences encourage future visits with similar or higher expectations. This forms the basis of the hypothesis:

H3: Perceived quality positively influences guest revisit intentions.

2.2.4. Guest word of mouth and revisit intention

Researchers have used various theories in identifying how WOM communication occurs across

industries. Mason (2008) pioneered the use of chaos theory to describe its unpredictable and dynamic nature.

In restaurants, satisfied customers share positive feedback on food, service, or ambiance, strengthening their emotional connection, increasing revisit likelihood. WOM influences both new and loyal customers, as returning reinforces and validates their positive choices. This leads to the hypothesis:

H4: Guest word of mouth positively influences guest revisit intentions.

3. Method

3.1. Research instrument

To rigorously test the proposed hypotheses, this study employed measurement instruments adapted from previously validated scales in the literature. These tools were not only selected for their established reliability and construct validity but also carefully contextualized for the Vietnamese restaurant environment to enhance cultural relevance and measurement accuracy. The adaptation process followed established translation and back-translation procedures, and modifications were guided by expert review and a pilot test with the target population to ensure linguistic clarity and contextual fit.

Exterior facilities were measured using 11 items adapted from Berman et al. (2018), widely recognized for capturing the influence of physical surroundings on consumer perceptions. Adjustments were made to account for localized architectural norms and signage typical in Vietnamese urban settings.

Interior design was captured using 10 items adapted from Bitner (1992) and Han and Ryu (2009). Items included aspects such as room temperature, cleanliness, noise level, and staff appearance, which were adapted to reflect the experiential aspects of typical Vietnamese dining environments.

The restaurant layout was measured with 6 items from Wirtz et al. (2012), focusing on spatial configuration and ease of movement, tailored to account for local norms in dining space utilization and customer flow.

Perceived quality was measured using 5 items based on Parasuraman et al. (1988), which were adapted for restaurant contexts by Han and Ryu (2009). These were customized to reflect service delivery expectations typical of Vietnamese diners.

WOM was assessed using 3 items adapted from Harrison-Walker (2001), focusing on customers' likelihood to recommend and speak positively about the restaurant.

Revisit intention was measured with 5 items adapted from Ryu and Han (2010), capturing consumers' behavioral intentions to return.

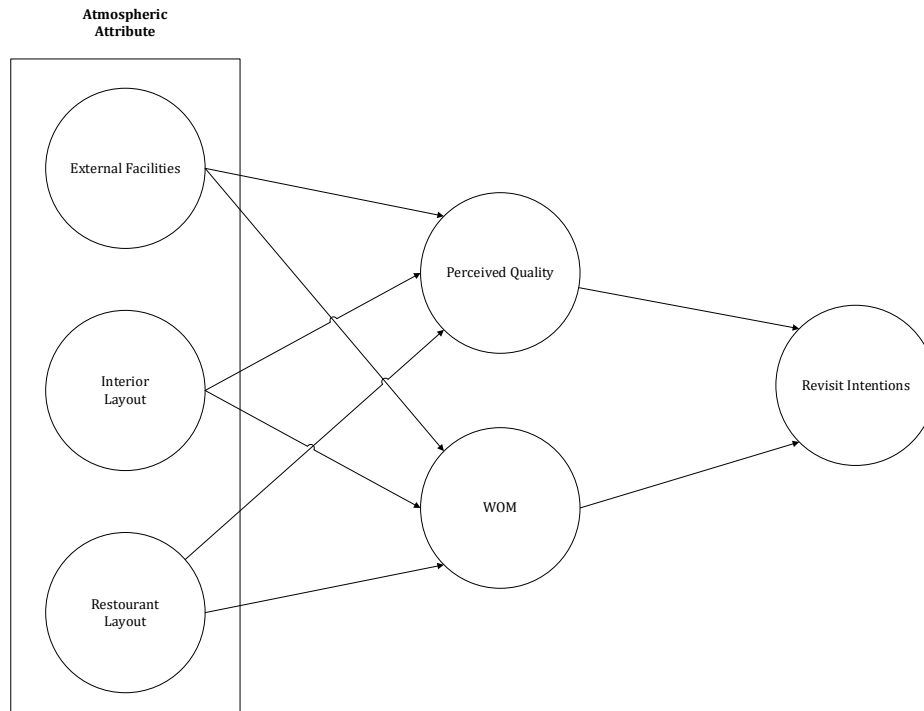


Fig. 1: Research model

All constructions were measured using a five-point Likert scale ranging from "very poor" (1) to "excellent" (5), allowing for consistent and interpretable evaluations across the survey. The questionnaire also includes general sociodemographic details such as age, occupation, personal income, and gender, and visit-related details such as money spent and first-time versus repeat visit. Questionnaire design was underpinned by a broad literature review and supported by expert validation by an academic with expertise in hospitality research. A pretest on tourists who visited chosen mountain restaurants to dine there was also held to determine the relevance and understandability of the items. Pretest comments were reflected in the creation of small improvements to enhance readability and quality in the final survey.

3.2. Population and sample

The sample for this research consisted of domestic and international tourists who had eaten from restaurants in sampled locations within Vietnam. Convenience sampling was utilized in participant selection, whereby the researchers recruited people who had just eaten. The process of data collection was conducted during November and December 2024. 290 visitors were initially approached, out of which 250 filled out the questionnaire. Following data screening, four answers were incomplete or unusable, leaving the final usable sample of 246 at a response rate of around 95%. Sample size determination is according to guidelines provided by Hair et al. (2019), who recommended for regression analysis that statistical power of 0.80 should be achieved to decide efficient detection of effect sizes. This ensures that the final sample has at least the level of statistical power

needed for establishing the generalizability and solidity of the findings.

3.3. Data analysis

To analyze the variable relationships in this study, the research adopted the Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The rationale for using the method was that it was best suited for predictive modeling and analyzing sophisticated models with many constructs (Hair et al., 2019). The analysis followed two overall steps: evaluating the measurement model (outer model) and evaluating the structural model (inner model). Internal consistency reliability was examined using Composite Reliability (CR) and Cronbach's Alpha (CA) with acceptable cutoff points at greater than 0.70 (Hair et al., 2019). Convergent validity was examined using the Average Variance Extracted (AVE), where the cutoff was 0.50 (Hair et al., 2019). Discriminant validity was also examined using the Fornell-Larcker criterion and HTMT, where the AVE of each construct must be greater than its squared correlation with other constructs (Fornell and Larcker, 1981). Following the confirmation of satisfactory reliability and validity of the measurement model, the analysis of the structural model was proceeded with. During this stage, research hypotheses were examined with path coefficients, t-statistics, and p-values derived from bootstrapping procedures with resampling set equal to the final sample size.

Two-tailed test at a 5% significance level was employed; i.e., with the t-value greater than 1.96, there was a statistically significant relation (Hair et al., 2019). This two-step process ensured both hypothesized relations and measurement quality were stringently tested.

4. Results

4.1. Sociodemographic profile of sample

Women and men are equally distributed in the sample. The survey data, based on 255 respondents, reveals that 1.2% are below 18 years old, 36.5% are aged 18-25, 35.3% are 26-30, 20.8% are 36-45, and 6.3% are above 45. Gender distribution shows 43.1% male and 56.9% female. Regarding current jobs, 13.3% are students, 67.1% are office staff, 18.8% are freelancers, while civil servants and others each make up 0.4%. Meal spending habits indicate that 19.2% spend under \$5 per meal, 20.4%

spend \$5-\$10, 23.1% spend \$10-\$15, 27.1% spend \$15-\$25, and 10.2% spend over \$25. The personal income data shows 4.7% earn under \$200/month, 9.8% earn \$200-\$450, 19.6% earn \$450-\$700, 23.5% earn \$700-\$1000, and 42.4% earn over \$1000. Lastly, 27.5% are first-time customers, while 72.5% are repeat customers.

4.2. Measurement model

First, the internal consistency reliability of the measurement model was validated using CA, CR, and AVE, presented in Table 1, and discriminant validity presented in Table 2 and SmartPLS in Fig. 2.

Table 1: Measurement model assessment

Construct	Items	Mean	STDEV	Factor loading	CA	CR	AVE
External facilities	EXFA03	4.322	0.796	0.688	0.843	0.881	0.515
	EXFA04	4.114	0.801	0.739			
	EXFA06	4.224	0.859	0.677			
	EXFA08	4.165	0.935	0.696			
	EXFA09	4.055	0.843	0.734			
	EXFA10	3.780	1.091	0.784			
Internal layout	EXFA11	3.902	0.913	0.699	0.856	0.893	0.582
	INLA03	4.090	0.754	0.740			
	INLA04	4.188	0.689	0.770			
	INLA05	4.275	0.769	0.662			
	INLA06	3.800	0.926	0.806			
	INLA09	3.639	1.053	0.783			
Restaurant layout	INLA10	4.102	0.690	0.805	0.809	0.868	0.570
	RELA01	3.788	0.779	0.770			
	RELA02	4.149	0.946	0.670			
	RELA03	3.788	1.064	0.863			
	RELA04	4.137	0.663	0.670			
	RELA06	3.973	0.754	0.784			
Perceived Quality	QUAL02	4.298	0.739	0.755	0.775	0.855	0.597
	QUAL03	4.204	0.729	0.785			
	QUAL04	4.306	0.709	0.808			
Guest word of mouth	QUAL05	4.157	0.668	0.740	0.791	0.877	0.704
	WOM1	4.216	0.684	0.771			
	WOM2	3.906	0.840	0.858			
Guest revisit to restaurants	WOM3	3.871	0.828	0.885	0.724	0.830	0.551
	REPU01	3.765	0.735	0.726			
	REPU03	3.216	1.122	0.730			
	REPU04	4.020	0.842	0.838			
	REPU05	4.165	0.706	0.664			

The data reveals insights into the constructions and their associated attributes. External Facilities (EXFA) achieved (CA = 0.843, CR = 0.881, AVE = 0.515); Internal Layout (INLA) achieved (CA = 0.856, CR = 0.893, AVE = 0.582); Restaurant Layout (RELA) achieved (CA = 0.809, CR = 0.868, AVE = 0.570); Perceived Quality (QUAL) achieved (CA = 0.775, CR =

0.855, AVE = 0.597); Guest WOM achieved (CA = 0.791, CR=0.887, AVE = 0.704). Last, Guest Revisit Intentions demonstrated moderate reliability (CA = 0.724, CR = 0.830, AVE = 0.551). These results underline the relevance of atmospheric attributes and their impact on perceived quality, WOM, and revisit intentions.

Table 2: Discriminant validity

Constructs	1	2	3	4	5	6
External facilities	0.718					
Guest revisit to restaurants	0.637	0.742				
Guest word of mouth	0.593	0.793	0.839			
Internal layout	0.681	0.582	0.608	0.763		
Perceived quality	0.575	0.64	0.587	0.548	0.772	
Restaurant layout	0.674	0.578	0.581	0.77	0.536	0.755
HTMT	1	2	3	4	5	6
External facilities						
Guest revisit to restaurants	0.807					
Guest word of mouth	0.709	1.038				
Internal layout	0.797	0.72	0.709			
Perceived quality	0.703	0.838	0.74	0.667		
Restaurant layout	0.816	0.731	0.686	0.909	0.668	

The square roots of the AVEs for each construct are: External Facilities (0.718), Guest Revisit to Restaurants (0.742), Guest Word of Mouth (0.839),

Internal Layout (0.763), Perceived Quality (0.772), and Restaurant Layout (0.755). The values reflect good discriminant validity because the square root

of AVE for each construct is higher than the correlations between constructs. Heterotrait-Monotrait ratio (HTMT) reflects that interconstruct correlations are lower than the cut-off points of 0.90. Overall, both Fornell-Larcker and HTMT criteria show outstanding discriminant validity for measures from this research.

4.3. Inner model structural

The inner model analysis evaluates the relationships between latent variables and the significance of the structural paths, as presented in Table 3 and Fig. 3. The results indicate the strength of these relationships

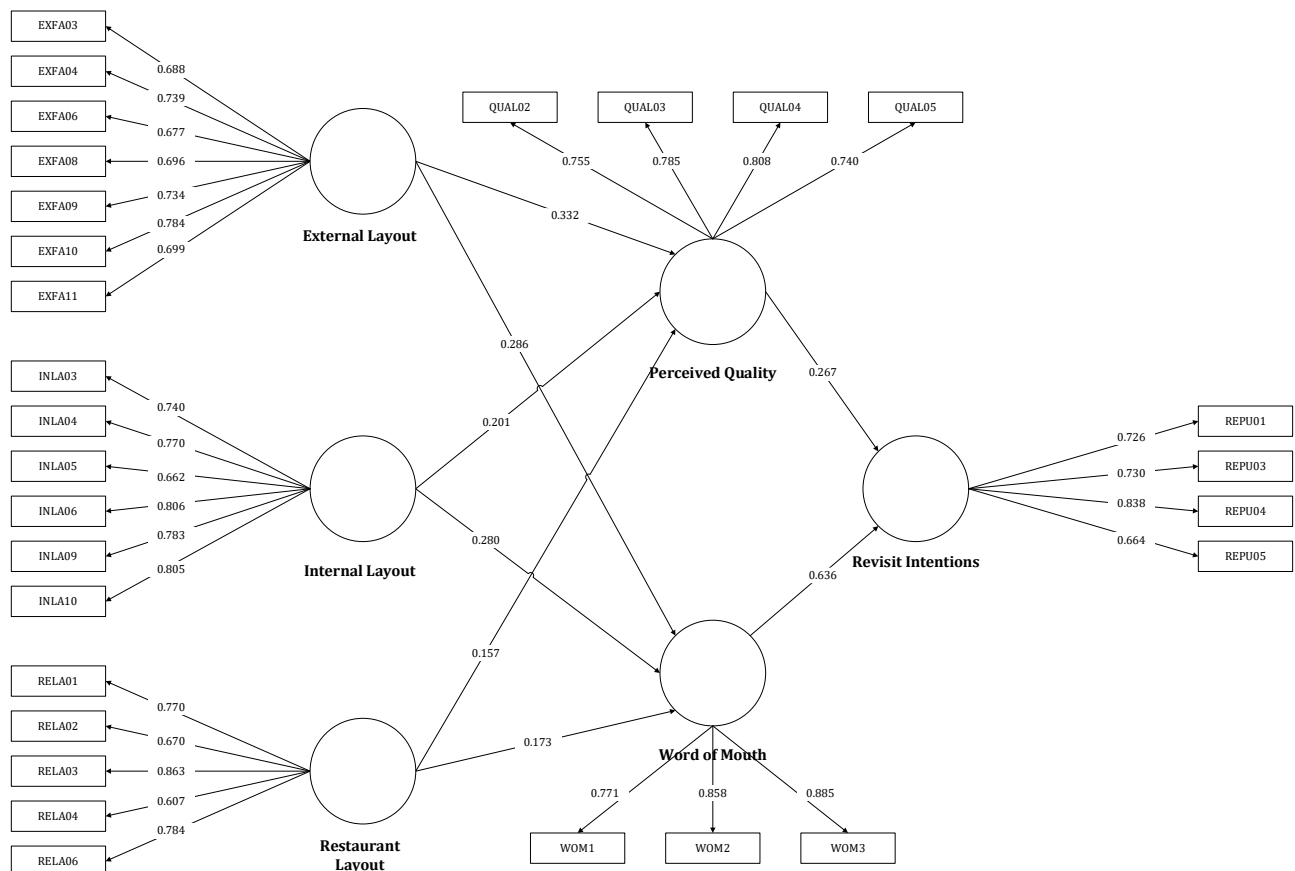


Fig. 2: Measurement model analysis

Table 3: Path coefficients of the structural model

Hypothesis	Path	Effect type	Coefficient (β)	t-value	p-value
H1a	External facilities → perceived quality	Direct	0.332	4.560	0.000
H1b	Internal layout → perceived quality	Direct	0.201	2.052	0.040
H1c	Restaurant layout → perceived quality	Direct	0.157	1.564	0.118
H2a	External facilities → guest WOM	Direct	0.286	3.468	0.001
H2b	Internal layout → guest WOM	Direct	0.280	3.126	0.002
H2c	Restaurant layout → guest WOM	Direct	0.173	1.836	0.066
H3	Perceived quality → guest revisit	Direct	0.267	5.308	0.000
H4	Guest WOM → guest revisit	Direct	0.636	14.599	0.000
—	External facilities → guest WOM → guest revisit	Indirect	0.182	3.248	0.001
—	Internal layout → guest WOM → guest revisit	Indirect	0.178	3.151	0.002
—	Restaurant layout → guest WOM → guest revisit	Indirect	0.110	1.810	0.070
—	External facilities → perceived quality → guest revisit	Indirect	0.088	2.987	0.003
—	Internal layout → perceived quality → guest revisit	Indirect	0.054	2.077	0.038
—	Restaurant layout → perceived quality → guest revisit	Indirect	0.042	1.451	0.147

The findings in Table 3 indicate that external facilities ($\beta = 0.332, p < 0.001$) and internal layout ($\beta = 0.201, p = 0.04$) significantly influence perceived quality, whereas restaurant layout ($\beta = 0.157, p = 0.118$) does not show a significant effect. Similarly, external facilities ($\beta = 0.286, p = 0.001$) and internal layout ($\beta = 0.28, p = 0.002$) have significant positive effects on guest word of mouth, while restaurant layout ($\beta = 0.173, p = 0.066$) does not exhibit a statistically significant impact. Furthermore, perceived quality has a strong positive influence on guest revisit intention ($\beta = 0.267, p < 0.001$), and

guest word of mouth is the most substantial predictor of guest revisit intention ($\beta = 0.636, p < 0.001$). These results suggest that external and internal structural factors play crucial roles in shaping guests' perceptions and behaviors, ultimately influencing their likelihood of revisiting the restaurant.

The results indicate that guest word of mouth significantly mediates the relationship between external facilities and guest revisit intention ($\beta = 0.182, p = 0.001$), and internal layout and guest revisit intention ($\beta = 0.178, p = 0.002$). However, the

mediating effect of guest word of mouth in the relationship between restaurant layout and guest revisit intention is not statistically significant ($\beta = 0.11, p = 0.07$). Similarly, perceived quality significantly mediates the influence of external facilities on guest revisit intention ($\beta = 0.088, p =$

0.003) and internal layout on guest revisit intention ($\beta = 0.054, p = 0.038$).

However, the mediating role of perceived quality in the relationship between restaurant layout and guest revisit intention is not significant ($\beta = 0.042, p = 0.147$).

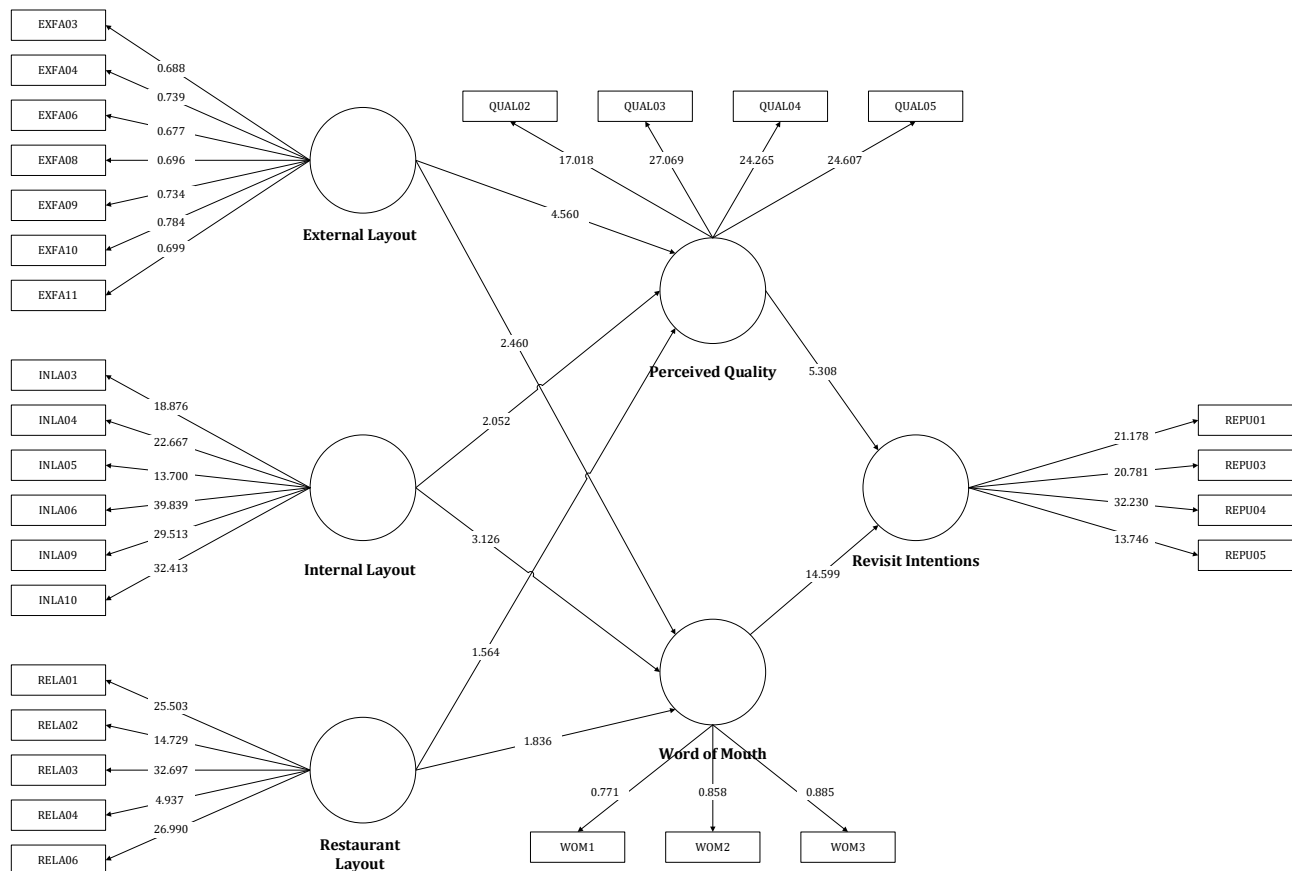


Fig. 3: Bootstrap model result

5. Discussion

The findings of this study highlight the role of restaurant atmospheric attributes in the formation of guest word of mouth and perceived quality, which further influences revisit intention. Exterior facilities (H1a) and interior design (H1b) were highly significant in having a positive impact on perceived quality, as indicated by previous literature that emphasizes the importance of first impression and attractive dining spaces in affecting perceived service quality (Bitner, 1992). But the restaurant layout's impact on perceived quality (H1c) was not significant, which suggests that cleanliness and functionality are key but would not necessarily have a dramatic effect on quality perception unless some other atmospheric dimensions are missing.

External facilities and interior layout (H2a, H2b) shape consumer experiences and encourage word of mouth, supported by past research on atmospheric signals like attractive facades and interiors (Ryu and Han, 2011). Nonetheless, the effect of restroom design on the word of mouth of the guests (H2c) was not statistically significant, suggesting it plays a lesser role in prompting guests to share their experiences. The relationship between environment

and perceived quality further underscores the importance of exterior and interior design.

Perceived quality influences guest revisit intention (H3), emphasizing the importance of superior service in repeat visits. This aligns with research (Konuk, 2019; Mannan et al., 2019; Parasuraman et al., 1988) showing that perceived quality strongly predicts consumer behavior in service environments. When a restaurant delivers good service, customers build trust, loyalty and are more likely to return. Additionally, word of mouth (H4) plays a crucial role in shaping customer decisions, as peer referrals and personal reviews serve as social proof, encouraging others to visit the restaurant.

This study confirms that atmospheric aspects, particularly exterior amenities and interior decor, play a significant role in influencing word of mouth and perceived quality, which, in turn, result in revisit intentions. This finding affirms the importance of comprehensive service environment design in influencing customer action and suggests that restaurant managers must pay attention to creating pleasing-to-the-eye as well as functionally comfortable dining environments to optimize customer satisfaction and loyalty.

5.1. Theoretical implications

This study advances the theoretical understanding of consumer behavior in the restaurant industry by extending the Stimulus-Organism-Response (S-O-R) model (Mehrabian and Russell, 1974) within the context of a Vietnamese service environment, an area that remains underexplored in the literature. The key theoretical contribution lies in the identification of Perceived Quality and WOM as dual mediators linking atmospheric stimuli (e.g., exterior configurations and interior designs) to customer behavioral responses, specifically revisit intentions. While prior studies have applied the S-O-R model to various service settings, few have explicitly examined the mediating mechanisms that explain how physical and sensory cues affect customer behavior in the food and beverage (F&B) sector. This study differentiates itself by empirically validating that environmental stimuli influence behavioral intentions through both cognitive (perceived quality) and social (word of mouth) pathways, thus enriching the explanatory power of the S-O-R framework. Notably, it extends the scope of existing research by demonstrating that word of mouth, often studied in digital contexts, retains strong predictive value in offline, socially driven markets like Vietnam, where interpersonal influence remains a dominant force in consumer decision-making. Furthermore, the integration of social dynamics as a core component of the organism stage provides a nuanced understanding of customer experience beyond individual perception. This refined model enhances theoretical insights by emphasizing the interplay between environmental cues, internal psychological processes, and culturally embedded social interactions. As such, this study not only reinforces the applicability of the S-O-R model in cross-cultural and sector-specific contexts but also offers a novel theoretical lens for analyzing customer retention strategies in emerging markets.

5.2. Managerial implications

For restaurant managers in Vietnam, the findings emphasize the importance of creating a strong atmosphere both outside and inside the restaurant to improve perceived quality, word of mouth, and revisit intention. Externally, restaurant owners should focus on visual appeal by using Vietnamese cultural elements such as wooden façades, hanging lanterns, and potted plants to give a warm, authentic feel. Well-designed signage using both Vietnamese and English can attract locals and tourists alike, while maintaining a clean and inviting entrance enhances first impressions. Internally, comfort and ambience are key. Vietnamese diners often eat in groups, so layouts should allow for communal seating. Soft lighting, noise control, and subtle traditional background music help create a relaxed environment. Managers should also ensure cleanliness, good ventilation, and visually appealing décor that reflects Vietnamese identity. Service

quality must be consistently high. Since revisit intention is influenced by perceived quality, staff should be trained to be courteous and attentive, as respectful service is highly valued in Vietnamese culture. The menu should be easy to navigate, with clear descriptions and photos of traditional dishes. Because word of mouth remains one of the strongest factors influencing dining choices in Vietnam, restaurants should encourage sharing through referral discounts, loyalty programs, and engagement on popular local platforms like Facebook, YouTube, and Instagram. Collaborating with local influencers or food vloggers can also increase reach. Lastly, sustainability can be a strong selling point. Customers increasingly appreciate efforts like using local ingredients, eco-friendly packaging, and maintaining high hygiene standards. These actions not only support environmental goals but also enhance the restaurant's reputation and customer trust.

6. Conclusion

This study examined the influence of restaurant atmospheric elements on revisit intentions, as mediated by guest word of mouth and perceived quality, in restaurant contexts in Vietnam. The findings demonstrate that interior design and exterior facilities positively influence both perceived quality and word of mouth, which results in repeat patronage. While restroom design did not have a significant direct influence, this does not detract from its contribution to general customer satisfaction. By using the S-O-R model in the hospitality context, this study provides both theoretical and managerial implications for the utilization of the use of atmospheric design to manage customer behavior. For restaurant managers, investment in quality physical environments is not just an aesthetic choice, but a strategic imperative to enhance perceived quality, generate positive word of mouth, and establish customer loyalty. Finally, creating wholesome and memorable experiences by using reflective atmospheric design can be a promising way of sustaining long-term success in the challenging restaurant industry.

6.1. Limitation

This study, while offering valuable insights into the influence of restaurant atmospherics on perceived quality, word of mouth, and revisit intentions, is not without limitations. The use of convenience sampling limits the generalizability of the findings, as the sample may not fully represent the broader population of restaurant visitors in Vietnam. Additionally, a cross-sectional design restricts the ability to capture changes in consumer perceptions over time. Cultural and regional contexts may also influence how environmental cues are perceived, potentially limiting the applicability of the results beyond the Vietnamese setting. Future

research should consider longitudinal methods and more diverse sampling strategies to enhance external validity and deepen understanding across different cultural environments.

List of abbreviations

AVE	Average variance extracted
CA	Cronbach's alpha
CR	Composite reliability
EXFA	External facilities (construct code)
F&B	Food and beverage
HTMT	Heterotrait–Monotrait ratio
INLA	Internal layout (construct code)
PLS-SEM	Partial least squares structural equation modeling
QUAL	Perceived quality (construct code)
RELA	Restaurant layout (construct code)
REPU	Guest revisit to restaurants (construct code)
S-O-R	Stimulus–organism–response
STDEV	Standard deviation
WOM	Word of mouth

Acknowledgment

The authors would like to express sincere gratitude to all respondents who participated in this study and to colleagues who provided valuable feedback during the research process.

Compliance with ethical standards

Ethical considerations

This study was conducted in accordance with established ethical research standards. Participation in the study was entirely voluntary, and informed consent was obtained from all respondents prior to data collection. Respondents were assured of confidentiality, and their responses were used solely for academic purposes. No sensitive personal data was collected, and anonymity was maintained throughout the research process.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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