



CUSTOMER SATISFACTION AS A MEDIATOR OF THE PREDICTIVE RELATIONSHIPS OF MENU USABILITY AND MENU INFORMATION QUALITY WITH MENU-BASED CUSTOMER PURCHASE CHOICE BEHAVIOR IN A CASUAL DINING RESTAURANT

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ABSTRACT

Restaurant menus play an important role in helping customers evaluate food and beverage options and make ordering decisions. However, limited research has examined menu usability and menu information quality simultaneously as predictors of menu-based customer purchase choice behavior, particularly with customer satisfaction as a mediating variable in Philippine casual dining restaurants. This study examined the relationships among these variables among customers of a selected casual dining restaurant in a city in Surigao del Sur, Philippines. Guided primarily by the Stimulus–Organism–Response (S–O–R) Theory, the study employed a predictive correlational design. Of the 240 customers recruited, 236 valid responses were analyzed. Data were collected using an adapted and researcher-developed questionnaire that underwent expert review and reliability testing. Descriptive statistics, multiple regression analysis, and bootstrapped mediation analysis were employed. Results showed high ratings for menu usability ($M = 4.43$, $SD = 0.46$), menu information quality ($M = 4.38$, $SD = 0.50$), customer satisfaction ($M = 4.43$, $SD = 0.54$), and menu-based customer purchase choice behavior ($M = 4.42$, $SD = 0.44$). Menu usability ($\beta = .345$, $p < .001$) and menu information quality ($\beta = .553$, $p < .001$) significantly predicted purchase choice behavior, with menu information quality emerging as the stronger predictor. Customer satisfaction significantly and partially mediated both relationships. Since the study used a cross-sectional, nonexperimental design, the findings indicate statistical relationships rather than causal effects. The results suggest that improving menu clarity, organization, accessibility, and information quality may support customer satisfaction and favorable purchase choice behavior.

Keywords: *Menu Usability, Accessibility, Visual Appeal, Organization, Menu Information Quality, Content Richness, Recommendations, Clarity, Customer Satisfaction, Menu-Based Customer Purchase Choice Behavior, Item Selection, Order Diversity, Preference for High-Priced Items, Casual Dining Restaurants, Mediation.*

INTRODUCTION

Restaurant menus play a central role in customer decision-making by providing information that helps diners compare and select food and beverage options. Their effectiveness depends on how easily customers can access, understand, and use the information provided. Research has examined menu design, visual appeal, and informativeness in relation to customer decision-making (Ngan et al., 2022; Brewer & Sebby, 2021). These areas provide a basis for examining menu usability and information quality in relation to menu-based customer purchase choice behavior in casual dining restaurants.

Research also indicates that menu characteristics matter across different service formats. Han et al. (2020) found that menu information quality was related to technology-acceptance characteristics and behavioral intentions toward restaurant kiosks. Similarly, Iskender et al. (2022) examined restaurant patrons' intentions to use QR-code menus, underscoring the importance of usability and contextual factors in customers' interactions with menu technologies.

The present study addresses a specific empirical need by examining menu usability and menu information quality together and by testing whether customer satisfaction statistically accounts for part of their associations with menu-based customer purchase choice behavior. Although previous studies have examined menu design, information, digital menus, and behavioral intentions, the evidence has been generated in different restaurant formats and national contexts (Brewer & Sebby, 2021; Han et al., 2020; Ip & Chark, 2023; Iskender et al., 2022). The present study therefore provides evidence from a selected casual dining restaurant in Surigao del Sur.

Specifically, the study examined menu usability in terms of accessibility, visual appeal, and organization; menu information quality in terms of content richness, recommendations, and clarity; customer satisfaction; and menu-based customer purchase choice behavior in terms of item selection, order diversity, and preference for high-priced items. It also tests whether customer satisfaction is a statistically significant mediator of the relationships between the two menu-related predictors and purchase choice behavior.

The study is guided primarily by the Stimulus–Organism–Response (S–O–R) perspective, in which external environmental cues may be associated with internal evaluations that are, in turn, associated with behavioral responses. In this study, menu usability and menu information quality are treated as menu-related stimuli, customer satisfaction as the intervening evaluative state, and menu-based customer purchase

choice behavior as the outcome. The cross-sectional design, however, does not establish temporal or causal order. The study may be linked to Sustainable Development Goal 8 (Decent Work and Economic Growth) through its potential relevance to service quality and the competitiveness of hospitality businesses. Any connection to SDG 9 (Industry, Innovation and Infrastructure) is secondary and should be interpreted as relating mainly to service-process and menu innovation.

Research Questions

This study aimed to assess menu usability, menu information quality, customer satisfaction, and menu-based customer purchase choice behavior among customers of a selected casual dining restaurant. It also examined the predictive relationships of menu usability and menu information quality with menu-based customer purchase choice behavior and tests the mediating role of customer satisfaction.

1. What is the participants' assessment of menu usability in terms of:
 - 1.1 Accessibility;
 - 1.2 Visual appeal; and
 - 1.3 Organization?
2. What is the participants' assessment of menu information quality in terms of:
 - 2.1 Content richness;
 - 2.2 Recommendations; and
 - 2.3 Clarity?
3. What is the participants' level of customer satisfaction?
4. What is the participants' assessment of menu-based customer purchase choice behavior in terms of:
 - 4.1 Item selection;
 - 4.2 Order diversity; and
 - 4.3 Preference for high-priced items?
5. Do menu usability and menu information quality significantly predict menu-based customer purchase choice behavior?
6. Does customer satisfaction significantly mediate the relationships between (a) menu usability and menu-based customer purchase choice behavior and (b) menu information quality and menu-based customer purchase choice behavior?

METHODOLOGY

The study used a predictive correlational research design to examine statistical relationships among menu usability, menu information quality, customer satisfaction, and menu-based customer purchase choice behavior. This design was appropriate because the variables were measured without experimental manipulation or random assignment. The design supports the estimation of predictive and indirect relationships but does not permit causal conclusions.

The target population was estimated at 600 customers of a selected casual dining restaurant in a city in Surigao del Sur, based on an average of approximately 20 dine-in customers per day over a 30-day period. Using Yamane's formula with a 5% margin of error, the required sample size was estimated at 240. A total of 240 eligible customers were recruited; 236 valid responses were included in the analyses, consistent with the frequency totals and the regression statistics reported in the results. Participants had recently used the restaurant menu when making an order, were at least 18 years old, could understand the questionnaire, and provided informed consent. Owners, managers, employees, suppliers, minors, and individuals who had not used the restaurant menu were excluded.

Eligible customers were recruited during the data-collection period after they had ordered or completed their meals. After informed consent was obtained, the questionnaire was administered onsite in printed form. Participants were given sufficient time to respond independently, and the researcher clarified procedural instructions without directing responses. Completed questionnaires were checked for completeness, and invalid or incomplete responses were excluded from the final analysis. The sampling procedure should be described as simple random sampling only if a complete sampling frame and documented random-selection process were used; otherwise, the recruitment procedure is more accurately reported as onsite customer intercept sampling.

The study used an adapted and researcher-developed questionnaire to measure the four major variables. Menu usability was assessed in terms of accessibility, visual appeal, and organization; menu information quality was assessed through content richness, recommendations, and clarity; customer satisfaction was measured as the mediating variable; and menu-based customer purchase choice behavior was assessed through item selection, order diversity, and preference for high-priced items. The instrument underwent expert review for content relevance and clarity and was pilot tested with 30 participants who had characteristics similar to the target respondents but were not included in the main study. Cronbach's alpha coefficients ranged from .804 to .922, indicating good to excellent internal consistency for the reported scales.

The questionnaire used a five-point Likert-type response scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). For descriptive interpretation, mean scores of 4.51–5.00 were classified as Very High, 3.51–4.50 as High, 2.51–3.50 as Moderate, 1.51–2.50 as Low, and 1.00–1.50 as Very Low. The verbal agreement labels should be kept distinct from the level interpretations.

Research Questions 1 to 4 were addressed using frequencies, percentages, means, and standard deviations. These statistics described the participants' assessments of menu usability, menu information quality, customer satisfaction, and menu-based customer purchase choice behavior, including their respective dimensions.

Research Question 5 was examined using multiple linear regression to determine whether menu usability and menu information quality significantly predicted menu-based customer purchase choice behavior. Regression coefficients, significance tests, and the

coefficient of determination (R^2) were reported. Research Question 6 was examined using mediation analysis with bootstrapped confidence intervals for the indirect effects. The total, direct, and indirect effects were reported. Because the data were cross-sectional, mediation findings are interpreted as statistical indirect associations rather than evidence of a causal mechanism.

Before the regression analysis, residual normality was assessed using a Q–Q plot and the Shapiro–Wilk test, and multicollinearity was assessed using tolerance and variance inflation factor (VIF) statistics. The reported VIF values of 2.270 for both predictors indicate no serious multicollinearity. Normality diagnostics should be reported with the actual test statistic and p value, rather than described simply as “acceptable.”

RESULTS AND DISCUSSION

Table 1 summarizes participants’ assessment of menu usability in terms of accessibility, visual appeal, and organization. The overall mean was 4.43 (SD = 0.46), interpreted as High. Accessibility obtained the highest mean ($M = 4.49$, $SD = 0.50$), followed by organization ($M = 4.42$, $SD = 0.56$) and visual appeal ($M = 4.37$, $SD = 0.55$). These results indicate generally favorable perceptions of menu usability among the respondents.

The descriptive findings suggest that participants generally considered the menu accessible, visually acceptable, and organized. The relatively small standard deviations indicate limited dispersion around the mean scores. However, these descriptive results do not by themselves demonstrate that menu usability causes changes in customer behavior.

Table 1
Summary Table Menu Usability

Dimensions	Mean	Interpretation	SD
Accessibility	4.49	High	0.50
Visual Appeal	4.37	High	0.55
Organization	4.42	High	0.56
Menu Usability	4.43	High	0.46

Scoring procedure: 4.51–5.00 was rated as Strongly Agree, 3.51–4.50 as Agree, 2.51–3.50 as Slightly Agree, 1.51–2.50 as Disagree, and 1.00–1.50 as Strongly Disagree.

Table 1 shows that menu usability was rated High overall ($M = 4.43$, $SD = 0.46$). Accessibility obtained the highest mean ($M = 4.49$, $SD = 0.50$), suggesting that

participants most consistently valued menus that were readily available, visible, and easy to read. The result is broadly consistent with research showing that menu presentation and design are associated with consumer responses (Ip & Chark, 2023). Visual appeal obtained the lowest mean ($M = 4.37$, $SD = 0.55$), although it remained within the High category. The numerical difference among the three dimensions is small; therefore, it should not be interpreted as evidence that customers consider accessibility substantially more important than visual appeal. Rather, all three aspects received favorable ratings. Table 2 summarizes participants' assessment of menu information quality in terms of content richness, recommendations, and clarity. The overall mean was 4.38 ($SD = 0.50$), interpreted as High. Recommendations obtained the highest mean ($M = 4.44$, $SD = 0.54$), followed by clarity ($M = 4.42$, $SD = 0.54$) and content richness ($M = 4.29$, $SD = 0.69$). The findings indicate generally favorable perceptions of the information provided by the menu. Prior research on restaurant and digital ordering contexts has likewise emphasized the relevance of menu information quality to customers' evaluations and behavioral intentions (Brewer & Sebbby, 2021; Han et al., 2020). Because the present study is correlational, these results should be interpreted as associations rather than causal effects.

Table 2
Summary Table Menu Information Quality

Dimensions	Mean	Interpretation	SD
Content Richness	4.29	High	0.69
Recommendations	4.44	High	0.54
Clarity	4.42	High	0.54
Menu Information Quality	4.38	High	0.50

Scoring procedure: 4.51–5.00 was rated as Strongly Agree, 3.51–4.50 as Agree, 2.51–3.50 as Slightly Agree, 1.51–2.50 as Disagree, and 1.00–1.50 as Strongly Disagree.

Table 2 shows a High overall rating for menu information quality ($M = 4.38$, $SD = 0.50$). Recommendations obtained the highest mean ($M = 4.44$, $SD = 0.54$), indicating favorable perceptions of menu cues that assist customers in considering available choices. Content richness obtained the lowest mean ($M = 4.29$, $SD = 0.69$), although it remained High. Its larger standard deviation indicates greater variation in respondents' perceptions of how complete or detailed the menu information was. This dimension may therefore warrant closer examination in future menu evaluations.

Table 3 presents the distribution of participants' assessment of customer satisfaction. The overall mean was 4.43 ($SD = 0.54$), interpreted as High. Of the 236 valid respondents represented in the table, 108 (45.76%) selected Strongly Agree, 107 (45.34%) selected

Agree, and 21 (8.90%) selected Neutral. The descriptive results indicate generally favorable satisfaction with the menu and its contribution to the dining experience. These findings should be interpreted as respondents' evaluations of the menu-related experience and should not be generalized beyond the study setting without further evidence.

Table 3
Frequency, Percentage, and Mean Distribution of the Participants' Assessment of Customer Satisfaction

Range	Response	Interpretation	Frequency	Percentage
4.51–5.00	Strongly Agree	Very High	108	45.76
3.51–4.50	Agree	High	107	45.34
2.51–3.50	Neutral	Moderate	21	8.90
1.51–2.50	Disagree	Low	0	0.00
1.00–1.50	Strongly Disagree	Very Low	0	0.00
Total			236	100.00
Overall Mean			4.43	High
SD			0.54	

Table 3 shows that customer satisfaction was rated High overall ($M = 4.43$), indicating that participants were generally satisfied with the menus and their contribution to the dining experience. The highest-rated indicator was “I am satisfied with the menu provided, and it meets my expectations” ($M = 4.46$, $SD = 0.63$). This suggests that the menus generally met customers' expectations and provided an experience consistent with what they anticipated when ordering. This finding is supported by Verma et al. (2023), who found that menu attributes such as menu design, item presentation, and product information were important factors associated with customer satisfaction and behavioral intentions. Thus, the high rating suggests that when menus provide an experience that meets customers' expectations, they are more likely to develop favorable evaluations of the restaurant.

Moreover, the lowest-rated indicator was “The menu improves my overall dining experience” ($M = 4.32$, $SD = 0.68$), although it remained within the High/Agree range. The higher standard deviation indicates greater variation in responses to this item. The result

suggests that respondents distinguished, to some extent, satisfaction with the menu itself from the broader dining experience.

Table 4 summarizes participants' assessment of menu-based customer purchase choice behavior. The overall mean was 4.42 (SD = 0.44), interpreted as High. Item selection obtained the highest mean (M = 4.47, SD = 0.47), followed by order diversity (M = 4.41, SD = 0.50) and preference for high-priced items (M = 4.37, SD = 0.57). The descriptive findings indicate that participants generally agreed with the statements used to measure menu-based purchase choice behavior. The dimension means should be interpreted as self-reported perceptions and tendencies, not as verified sales records or observed purchasing behavior.

Table 4
Summary Table of Purchase Behavior

Dimensions	Mean	Interpretation	SD
Item selection	4.47	High	0.47
Order Diversity	4.41	High	0.50
Preference for high priced items	4.37	High	0.57
Purchase Behavior	4.42	High	0.44

Scoring procedure: 4.51–5.00 was rated as Strongly Agree, 3.51–4.50 as Agree, 2.51–3.50 as Slightly Agree, 1.51–2.50 as Disagree, and 1.00–1.50 as Strongly Disagree.

Table 4 shows a High overall rating for menu-based customer purchase choice behavior (M = 4.42, SD = 0.44). Item selection received the highest mean (M = 4.47, SD = 0.47), indicating strong agreement with statements concerning the role of the menu in selecting items. Preference for high-priced items obtained the lowest mean (M = 4.37, SD = 0.57), although it remained High. This result does not establish that participants were generally inclined to buy expensive items; it only indicates favorable responses to the specific scale items used to operationalize that dimension. The comparatively larger standard deviation suggests greater variation among respondents.

Table 5 presents the multiple regression analysis examining whether menu usability and menu information quality significantly predict menu-based customer purchase choice behavior. The overall regression model was statistically significant, $F = 285.99$, $p < .001$, indicating that the two predictors, considered together, significantly improved the prediction of menu-based customer purchase choice behavior compared with a model containing no predictors. The model yielded $R = .843$, $R^2 = .711$, and adjusted $R^2 = .708$. The R^2 of .711 indicates that, within the analyzed sample and regression model, 71.1% of the variance in menu-based customer purchase choice behavior was accounted for by its linear relationship with menu usability and menu information quality. The adjusted R^2 of .708 was slightly lower after accounting for the number of predictors in the model. The

remaining 28.9% of the variance was not accounted for by these two predictors. This unexplained variance may reflect other variables that were not included in the model. Previous research suggests that other restaurant-related factors, including food quality, perceived price, brand image, ambiance, and service-related factors, may also be associated with customers' restaurant selection and behavioral outcomes (Cristobal-Lobaton et al., 2025) and (Gumasing, 2025).

For menu usability, the unstandardized regression coefficient was $B = .329$ ($\beta = .345$, $t = 6.494$, $p < .001$). Therefore, the null hypothesis stating that menu usability does not significantly predict menu-based customer purchase choice behavior is rejected. Holding menu information quality constant, a one-unit higher score in menu usability was associated with an estimated .329-unit higher predicted score in menu-based customer purchase choice behavior. The positive predictive relationship suggests that, within the context of this study, menus perceived as more accessible, visually appealing, and organized were associated with higher predicted levels of customer purchase choice behavior. This finding is consistent with Ip et al. (2023), as cited in the study, which reported relationships between menu design and consumers' attitudes and behavioral responses. The finding suggests that restaurant managers may consider maintaining menus that are easy to access, understand, and navigate as part of supporting customers during the ordering process.

For menu information quality, the unstandardized regression coefficient was $B = .488$ ($\beta = .553$, $t = 10.418$, $p < .001$). Thus, the null hypothesis stating that menu information quality does not significantly predict menu-based customer purchase choice behavior is rejected. Holding menu usability constant, a one-unit higher score in menu information quality was associated with an estimated .488-unit higher predicted score in menu-based customer purchase choice behavior. Menu information quality had a larger standardized regression coefficient than menu usability ($\beta = .553$ versus $\beta = .345$), indicating a stronger relative contribution to prediction in this particular model and sample. This finding is consistent with the aforementioned literature in the study, in which Gopal et al. (2024) associated menu informativeness with purchase intentions and Lin et al. (2023) reported relationships between menu formats, perceived information quality, and behavioral intentions. The finding suggests that providing clear, relevant, and understandable menu information may be an important consideration when restaurants review their menus.

Overall, the findings imply that both usability and information quality may be considered in menu development and evaluation, particularly when the objective is to support customers in evaluating available options and making ordering decisions. However, because the study used a predictive correlational and nonexperimental design, these implications should be interpreted cautiously and do not establish causal effects.

Table 5
Multiple Regression Analysis of Menu Usability and Menu Information Quality as Predictors of Menu-Based Customer Purchase Choice Behavior

	Unstandardized Coefficients	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	t	Sig.
(Constant)	.822	.154		5.328	.000
Menu Usability	.329**	.051	.345	6.494	.000
Menu Information quality	.488**	.047	.553	10.418	.000
Model Summary	R = .843	R ² = .711	Adj. R ² = .708	F = 285.99	p < .001

Note. Dependent variable: menu-based customer purchase choice behavior. **p < .01; all reported predictor p values are < .001.

Table 6 presents the mediation analysis for the relationship between menu usability and menu-based customer purchase choice behavior, with customer satisfaction specified as the mediator. The total effect was significant (B = 0.7248, SE = 0.0399, t = 18.158, p < .001, 95% CI [0.6462, 0.8034]). The direct effect remained significant after including customer satisfaction (B = 0.5109, SE = 0.0504, t = 10.133, p < .001, 95% CI [0.4116, 0.6102]). The indirect effect was also statistically significant because its bootstrap confidence interval did not include zero (B = 0.2139, SE = 0.0460, 95% CI [0.1293, 0.3102]). These results are consistent with partial statistical mediation.

The finding indicates that customer satisfaction accounted statistically for part, but not all, of the association between menu usability and menu-based customer purchase choice behavior. Because the study used cross-sectional data, this pattern should not be interpreted as establishing that menu usability causes satisfaction, which then causes purchase behavior. Longitudinal or experimental evidence would be needed to support a causal mediation claim.

Table 6
Mediation Analysis of Customer Satisfaction in the Relationship Between Menu Usability and Menu-Based Customer Purchase Choice Behavior

Total Effect (Menu Usability → Menu-Based Customer Purchase Choice Behavior)	0.7248	0.0399	18.158	< .001	0.6462	0.8034	Significant
Direct Effect (Menu Usability → Menu-Based Customer Purchase Choice Behavior)	0.5109	0.0504	10.133	< .001	0.4116	0.6102	Significant

Indirect Effect (Menu Usability → Customer Satisfaction → Menu-Based Customer Purchase Choice Behavior)	0.2139	0.0460	—	—	0.1293	0.3102	Significant
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Table 6 shows significant total, direct, and indirect effects. The bootstrap confidence interval for the indirect effect excluded zero, supporting the statistical significance of the indirect association. Because the direct effect remained significant, the pattern is conventionally described as partial mediation. In one hand, the indirect effect ($B = 0.2139$, 95% bootstrap CI [0.1293, 0.3102]) was smaller in magnitude than the total effect, but it was statistically significant. The result supports customer satisfaction as an intervening statistical variable in the estimated model, subject to the limitations of cross-sectional design.

Table 7 presents the mediation analysis for the relationship between menu information quality and menu-based customer purchase choice behavior, with customer satisfaction specified as the mediator. The total effect was significant ($B = 0.7154$, $SE = 0.0349$, $t = 20.499$, $p < .001$, 95% CI [0.6466, 0.7842]). The significant total association indicates that higher perceived menu information quality was associated with higher scores on menu-based customer purchase choice behavior in the study sample. This interpretation is consistent with research linking menu informativeness to purchase intentions and related behavioral outcomes, particularly in digital ordering contexts (Brewer & Sebbby, 2021; Gopal et al., 2024).

The direct effect remained significant after customer satisfaction was included ($B = 0.5616$, $SE = 0.0444$, $t = 12.6526$, $p < .001$, 95% CI [0.4742, 0.6491]). The indirect effect through customer satisfaction was also statistically significant because its bootstrap confidence interval excluded zero ($B = 0.1538$, $SE = 0.0418$, 95% CI [0.0739, 0.2367]). This pattern is consistent with partial statistical mediation. The results suggest that customer satisfaction statistically accounted for part of the association between perceived menu information quality and menu-based customer purchase choice behavior. The findings do not, however, establish temporal order or causality.

Within the S–O–R framing, menu information quality can be conceptualized as an external stimulus, customer satisfaction as an internal evaluative state, and menu-based customer purchase choice behavior as the response. This theoretical interpretation is useful for organizing the findings but should not be presented as causal confirmation of the model.

Table 7
Mediation Analysis of Customer Satisfaction in the Relationship Between Menu Information Quality and Menu-Based Customer Purchase Choice Behavior

Total Effect (Menu Information Quality → Menu-Based Customer Purchase Choice Behavior)	0.7154	0.0349	20.499	< .001	0.6466	0.7842	Significant
Direct Effect (Menu Information Quality → Menu-Based Customer Purchase Choice Behavior)	0.5616	0.0444	12.6526	< .001	0.4742	0.6491	Significant
Indirect Effect (Menu Information Quality → Customer Satisfaction → Menu-Based Customer Purchase Choice Behavior)	0.1538	0.0418	—	—	0.0739	0.2367	Significant

Table 7 shows significant total, direct, and indirect effects. The total effect was $B = 0.7154$ ($p < .001$), and the bootstrap confidence interval for the indirect effect was $[0.0739, 0.2367]$, excluding zero. The pattern is therefore consistent with partial mediation in the estimated statistical model. The indirect effect was statistically significant ($B = 0.1538$, 95% bootstrap CI $[0.0739, 0.2367]$), while the direct effect remained significant ($B = 0.5616$, $p < .001$). These findings support partial statistical mediation, subject to the limitations of a cross-sectional correlational design.

Conclusions

The study concludes that the results provide empirical support for the applicability of the Stimulus–Organism–Response (S–O–R) framework in the context of restaurant menu-related decision-making. The pattern of relationships is conceptually consistent with the framework, wherein menu characteristics serve as external stimuli, customer satisfaction represents an internal evaluative state, and menu-based purchase choice behavior represents the response. However, this support should be interpreted within the study's limitations: the cross-sectional, predictive correlational design does not establish causal relationships; the use of self-reported measures may be subject to response bias; and the findings were derived from customers of a selected casual dining restaurant, which may limit their generalizability to other restaurant settings or customer populations.

Recommendations

Based on the findings and the limitations of the study, the following recommendations are offered:

1. Restaurant managers may review menus for readability, logical organization, accessibility, clarity, and completeness of information. Recommendations or best-seller

cues may be used where appropriate, provided that they are accurate and do not mislead customers.

2. Restaurants may periodically evaluate menu effectiveness through customer feedback and, where available, sales or ordering data. If digital or QR-code menus are used, usability, readability, accessibility, and the accuracy of ingredient and allergen information should be considered.

3. Hospitality and business educators may use menu evaluation and redesign activities to help students connect customer-centered communication with consumer decision-making. The present study may be discussed as a local example while emphasizing its single-setting and correlational limitations.

4. Current and aspiring restaurant entrepreneurs may treat menu design as part of the customer communication process rather than solely as a list of products. Design decisions should be tested with customers rather than assumed to produce sales or loyalty outcomes.

5. Local tourism and hospitality stakeholders may consider menu clarity and accessibility as part of visitor experience initiatives, especially when serving guests who may be unfamiliar with local dishes. Claims about destination image or tourist satisfaction should be evaluated through studies that measure those outcomes directly.

6. Future researchers should include multiple restaurant types and locations and use probability-based sampling when feasible. Longitudinal, experimental, or field designs and objective ordering or sales data would strengthen evidence regarding temporal and causal relationships. Future work may also examine perceived value, service quality, price, trust, loyalty, and digital-menu usability.

Compliance with Ethical Standards

The authors state that informed consent was obtained from participants and that participation was voluntary. Participants were informed of their right to withdraw, and reasonable measures were taken to protect anonymity and the confidentiality of research data. Any institutional ethics review or approval should be reported, including the approving body and reference number, if applicable. The authors should also provide a specific conflict-of-interest statement and, where required by the target journal, a funding statement. Ethical compliance should be described factually rather than through unsupported assurances.

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