IGNATIAN
INTERNATIONAL JOURNAL FOR MULTIDISCIPLINARY RESEARCH
www.icceph.com
ISSN 2984-9942

# FOOD QUALITY AS MEDIATING VARIABLE ON THE PREDICTORS OF CUSTOMER-BASED SUSTAINABILITY OUTCOMES AMONG INFORMAL FOOD ESTABLISHMENTS, FOOD SERVICES ESTABLISHMENTS

Asteria P. Anoc
Cyril C. Chavez

*Master of Science in Hospitality Management, Lourdes College,Inc,*
*Cagayan de Oro City, Philippines*

## ABSTRACT

Informal food service establishments, including small eateries, carinderias, food stalls, and family-operated food businesses, provide accessible food services and contribute to economic activity in rural communities. However, limited empirical research has examined the relationships of service management quality and customer relationship practices with customer-based sustainability outcomes, particularly through food quality as a mediating variable in rural Philippine settings. This study examined these relationships among customers of selected informal food service establishments in Misamis Oriental, Philippines. Of the 300 completed responses, 33 were excluded following outlier screening, leaving 267 valid responses for analysis. Guided by Social Exchange Theory, the study employed a quantitative descriptive-correlational research design using an adapted and validated questionnaire. Confirmatory Factor Analysis, descriptive statistics, multiple regression analysis, and Hayes' PROCESS Macro Model 4 were employed for data analysis. Results showed high levels of service management quality (M = 4.33, SD = 0.50), customer relationship practices (M = 4.39, SD = 0.54), food quality (M = 4.43, SD = 0.54), and customer-based sustainability outcomes (M = 4.38, SD = 0.47). Service management quality ($\beta = .351$, $p < .001$) and customer relationship practices ($\beta = .575$, $p < .001$) significantly predicted customer-based sustainability outcomes, with customer relationship practices demonstrating the stronger relative contribution. Food quality partially mediated both relationships. Since the study employed a correlational design, the findings indicate statistical relationships rather than causal effects. The results suggest that effective service management and positive customer relationship practices, supported by good food quality, are associated with customer trust,

continued patronage, and willingness to recommend informal food service establishments.

**Keywords:** *Service Management Quality, Accuracy of Orders, Organization of Service Flow, Staff Coordination, Customer Relationship Practices, Friendliness, Personalized Interaction with Customers, Responsiveness to Customer Needs, Food Quality, Customer-Based Sustainability Outcomes, Customer Trust, Intention to Continue Patronizing, Willingness to Recommend, Mediation.*

## INTRODUCTION

Informal food service establishments, including carinderias, small eateries, food stalls, and family-operated restaurants, provide accessible meals and contribute to economic activity in rural communities. These businesses support local entrepreneurship and employment while serving the daily food needs of residents. However, their continued operation depends partly on their ability to maintain favorable customer experiences despite limited resources, increasing food prices, and competition. Customers generally consider food quality, service performance, and their interactions with employees when evaluating food service establishments. In the Philippine setting, Padillo et al. (2022) identified food and service attributes as relevant considerations in customer loyalty among single-dish restaurants. These conditions provide a basis for examining Service Management Quality, Customer Relationship Practices, Food Quality, and Customer-Based Sustainability Outcomes in informal food service establishments.

Research has established that service quality, customer interactions, and food-related attributes are associated with customer evaluations and behavioral intentions in restaurant settings. Service Management Quality, as examined in the present study, involves accuracy of orders, organization of service flow, and staff coordination. These practices may contribute to customers' perceptions of efficient and dependable service delivery. Similarly, Customer Relationship Practices involve friendliness, personalized interaction with customers, and responsiveness to customer needs. Rather and Hollebeek (2021) discussed the relevance of customer engagement and relationship-related experiences in shaping customer responses, while Shin et al. (2023) examined service-related factors associated with favorable hospitality outcomes. Sirimongkol (2022) Food quality has likewise been associated with customer satisfaction and loyalty-related responses in restaurant settings (Singh et al., 2021; Konuk, 2019; Sanjaya & Mulyono, 2023). These findings provide a foundation for examining the relationships among service management, customer relationship practices, food quality, and customer-based sustainability outcomes.

Although previous studies have examined service quality, customer relationships, and food quality in hospitality and restaurant settings, limited empirical research has investigated these variables together within informal food service establishments in rural Philippine communities. Three research gaps can be identified. First, a variable gap exists in examining Service Management Quality and Customer Relationship Practices

simultaneously as predictors of Customer-Based Sustainability Outcomes. Second, a mediation gap remains concerning the role of Food Quality in explaining the relationships between these service-related practices and customer-based outcomes. Third, a contextual gap exists because much of the available evidence focuses on formal restaurants and other established hospitality settings rather than small-scale food businesses in rural communities (Padillo et al., 2022; Islam et al., 2023). Therefore, further investigation is needed to determine how these variables are statistically associated within informal food service establishments.

The present study addresses these gaps by examining Service Management Quality and Customer Relationship Practices as predictors of Customer-Based Sustainability Outcomes, with Food Quality as the mediating variable. Specifically, Service Management Quality is examined in terms of accuracy of orders, organization of service flow, and staff coordination, while Customer Relationship Practices are assessed through friendliness, personalized interaction with customers, and responsiveness to customer needs. Food Quality is examined as the intervening variable, while Customer-Based Sustainability Outcomes are assessed through customer trust, intention to continue patronizing, and willingness to recommend. The study also tests whether Food Quality statistically mediates the respective relationships of Service Management Quality and Customer Relationship Practices with Customer-Based Sustainability Outcomes among customers of selected informal food service establishments in Misamis Oriental, Philippines.

The study is guided primarily by Social Exchange Theory, which explains how perceived benefits and reciprocal responses influence relationships between individuals and service providers. In food service settings, customers evaluate their experiences based on the services received, their interactions with employees, and the quality of the food provided. These evaluations may be associated with favorable customer responses, including trust, continued patronage, and willingness to recommend an establishment. The study treats Service Management Quality and Customer Relationship Practices as predictor variables, Food Quality as the mediating variable, and Customer-Based Sustainability Outcomes as the outcome variable. Since the study employs a cross-sectional, nonexperimental correlational design, the findings establish statistical relationships rather than causal effects. The research is also relevant to Sustainable Development Goal 8 (Decent Work and Economic Growth), particularly in relation to the continued viability of small food enterprises, local entrepreneurship, and employment opportunities in rural communities.

## Research Questions

This study aimed to investigate the mediating role of food quality in the relationship between service management quality, customer relationship practices, and customer-based sustainability outcomes of informal food service establishments. The specific research questions to be addressed in this research are as follows:

1. What is the participants' assessment of service management quality in terms of:

1.1 Accuracy of Orders;
1.2 Organization of Service Flow; and
1.3 Staff Coordination?

2. What is the participants' assessment of customer relationship practices in terms of:
2.1 Friendliness;
2.2 Personal Interaction with Customers; and
2.3 Responsiveness to Customer Needs?

3. What is the participants' assessment of food quality?

4. What is the participants' assessment of customer-based sustainability outcomes in terms of:
4.1 Customer Trust;
4.2 Intention to Continue Patronizing the Establishment; and
4.3 Willingness to Recommend the Establishment?

5. Do service management quality and customer relationship practices influence customer-based sustainability outcomes?

6. Does food quality mediate the relationship between service management quality, customer relationship practices, and customer-based sustainability outcomes?

## METHODOLOGY

The study employed a quantitative descriptive-correlational research design to examine the predictive relationships among Service Management Quality, Customer Relationship Practices, Food Quality, and Customer-Based Sustainability Outcomes. This design was appropriate because the study examined the statistical relationships among the variables without experimental manipulation. Food Quality was examined as the mediating variable using Hayes' PROCESS Macro Model 4.

The target population consisted of an estimated 2,700 customers from three selected informal food service establishments in a municipality in Misamis Oriental, Philippines. Using the Taro Yamane formula with a 5% margin of error, the required sample size was calculated at 348 respondents. However, 300 eligible customers voluntarily participated in the study. Following data screening and outlier analysis, 33 responses were excluded, resulting in 267 valid responses for the final analysis. Purposive sampling was employed to select participants who met the established inclusion criteria.

Participants were required to be at least 18 years old, to have completed their dining experience, and to have dined at one of the selected establishments within the previous three months. Participation was voluntary, and informed consent was obtained before questionnaire administration. Completed questionnaires were reviewed for eligibility and completeness and screened for potential outliers before statistical analysis.

The study employed an adapted and validated questionnaire to measure the four major variables. The instrument underwent expert evaluation to assess the relevance and clarity of its items and was pilot-tested with 30 participants who were not included in the actual survey. Confirmatory Factor Analysis (CFA) was subsequently conducted to assess the construct validity of the measurement model.

The questionnaire used a five-point Likert-type 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.

Research Questions 1 to 4 were addressed using frequency, percentage, weighted mean, and standard deviation. These statistical measures described the respondents' assessments of Service Management Quality, Customer Relationship Practices, Food Quality, and Customer-Based Sustainability Outcomes, including their respective dimensions.

Research Question 5 was examined using multiple linear regression analysis to determine whether Service Management Quality and Customer Relationship Practices significantly predicted Customer-Based Sustainability Outcomes. Regression coefficients, significance levels, and the coefficient of determination ($R^2$) were examined to assess the predictive relationships between the variables.

Research Question 6 was examined using mediation analysis through Hayes' PROCESS Macro Model 4 with 5,000 bootstrap samples and 95% bias-corrected confidence intervals. Total, direct, and indirect effects were assessed to determine whether Food Quality significantly mediated the relationships between Service Management Quality and Customer-Based Sustainability Outcomes and between Customer Relationship Practices and Customer-Based Sustainability Outcomes. Mediation was considered statistically significant when the bootstrap confidence interval for the indirect effect did not include zero.

Before conducting the inferential analyses, the data were screened for potential outliers, and relevant statistical assumptions were assessed. Normality was examined through appropriate diagnostic procedures, while multicollinearity was assessed using tolerance and Variance Inflation Factor (VIF) statistics. Since the study employed a cross-sectional, nonexperimental design, the mediation findings were interpreted as statistical indirect associations rather than evidence of causal relationships.

## RESULTS AND DISCUSSION

Table 1 summarizes the participants' assessment of Service Management Quality in terms of Accuracy of Orders, Organization of Service Flow, and Staff Coordination. The overall mean was 4.33 (SD = 0.50), interpreted as High. Staff Coordination obtained the highest mean (M = 4.34, SD = 0.55), followed by Accuracy of Orders (M = 4.33, SD =

0.56) and Organization of Service Flow (M = 4.30, SD = 0.55). These results indicate generally favorable perceptions of the service management practices of the selected informal food service establishments.

The descriptive findings suggest that participants generally perceived the establishments' service management practices positively. The relatively small differences among the three-dimension means indicate that respondents had similar assessments of accuracy of orders, organization of service flow, and staff coordination. However, these descriptive results represent participants' perceptions and do not independently establish relationships with customer-based sustainability outcomes.

**Table 1**
**Summary Table of Service Management Quality**

| Dimensions | Mean | Interpretation | SD |
|---|---|---|---|
| Accuracy of orders | 4.33 | High | 0.56 |
| Organization of Service | 4.30 | High | 0.55 |
| staff Coordination | 4.34 | High | 0.55 |
| Service management quality | 4.33 | 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 were utilized.*

Table 1 shows that Service Management Quality was rated High overall (M = 4.33, SD = 0.50). Staff Coordination obtained the highest mean (M = 4.34, SD = 0.55), suggesting that participants positively perceived employees' coordination during service delivery. In contrast, Organization of Service Flow received the lowest mean (M = 4.30, SD = 0.55), although it remained within the High category. These findings are consistent with previous studies that identified service-related attributes as relevant to customer experiences and loyalty in restaurant settings (Singh et al., 2021; Wen et al., 2021; Padillo et al., 2022).

Table 2 summarizes participants' assessment of Customer Relationship Practices in terms of friendliness, personalized interaction with customers, and responsiveness to customer needs. The overall mean was 4.39 (SD = 0.54), interpreted as High. Friendliness obtained the highest mean (M = 4.44, SD = 0.53), followed by personalized interaction with customers (M = 4.42, SD = 0.58) and responsiveness to customer needs (M = 4.37, SD = 0.56). The findings indicate generally favorable perceptions of the customer relationship practices of the selected informal food service establishments. Prior research has likewise associated customer-related experiences and service practices with favorable customer evaluations and loyalty-related outcomes (Khan et al., 2021; Padillo et al., 2022).

**Table 2**
**Summary Table of Customer Relations Practices**

| Dimensions | Mean | Interpretation | SD |
|---|---|---|---|
| Friendliness | 4.44 | High | 0.53 |

| | | | |
|---|---|---|---|
| Personal interaction | 4.42 | High | 0.58 |
| Responsiveness | 4.37 | High | 0.56 |
| Customer relations practices | 4.39 | High | 0.54 |

*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 were utilized.*

Table 2 shows a High overall rating for Customer Relationship Practices (M = 4.39, SD = 0.54). Friendliness obtained the highest mean (M = 4.44, SD = 0.53), indicating favorable perceptions of employees' friendly interactions with customers. Responsiveness to Customer Needs obtained the lowest mean (M = 4.37, SD = 0.56), although it remained High. The small difference between the highest and lowest means indicates generally favorable perceptions across the three dimensions. This finding is consistent with research linking positive customer experiences and service-related practices with favorable loyalty outcomes (Khan et al., 2021; Padillo et al., 2022).

Table 3 presents the distribution of participants' assessment of Food Quality. The overall mean was 4.43 (SD = 0.54), interpreted as High. Of the 267 participants, 126 (47.19%) rated Food Quality as Very High, another 126 (47.19%) rated it as High, and 15 (5.62%) rated it as Moderate. None of the participants rated Food Quality as Low or Very Low. The findings indicate generally favorable perceptions of the food served by the selected informal food service establishments.

**Table 3**
**Frequency, Percentage, and Mean Distribution of Participants' Assessment of the Level of Food Quality**

| Range | Description | Interpretation | Frequency | Percentage |
|---|---|---|---|---|
| 4.51-5.00 | Strongly Agree | Very High | 126 | 47.19 |
| 3.51-4.50 | Agree | High | 126 | 47.19 |
| 2.51-3.50 | Slightly Agree | Moderate | 15 | 5.62 |
| 1.51-2.50 | Disagree | Low | 0 | 0.00 |
| 1.00-1.50 | Strongly Disagree | Very Low | 0 | 0.00 |
| | | Total | 267 | 100.0 |
| | | Overall Mean | 4.43 | |
| | | Interpretation | High | |
| | | SD | 0.54 | |

Table 3 shows that the statement "The food served is freshly prepared" obtained the highest mean (M = 4.47, SD = 0.62), followed by "Ingredients taste fresh and natural" (M = 4.45, SD = 0.61). These findings indicate that participants particularly valued the freshness of the food and its ingredients. Wen et al. (2021) likewise identified food-related characteristics as relevant to customers' restaurant experiences.

Moreover, the statement "The menu items reflect good value for money" obtained the lowest mean (M = 4.38, SD = 0.66), although it remained within the Agree category. The small difference of 0.09 between the highest and lowest means indicates generally consistent perceptions across the Food Quality indicators. Singh et al. (2021) associated

food quality with customer satisfaction and loyalty-related outcomes, while Padillo et al. (2022) identified food attributes as relevant to customer loyalty in Philippine restaurant settings.

Table 4 summarizes participants' assessment of Customer-Based Sustainability Outcomes in terms of customer trust, intention to continue, and willingness to recommend. The overall mean was 4.38 (SD = 0.47), interpreted as High. Willingness to Recommend obtained the highest mean (M = 4.42, SD = 0.56), followed by Customer Trust (M = 4.37, SD = 0.49) and Intention to Continue (M = 4.34, SD = 0.56). The findings indicate generally favorable customer-related outcomes toward the selected informal food service establishments.

**Table 4**
**Summary Table of Customer-Based Sustainability Outcomes**

| Dimensions | Mean | Interpretation | SD |
|---|---|---|---|
| Customer trust | 4.37 | High | 0.49 |
| Intention to Continue | 4.34 | High | 0.56 |
| Willingness to recommend | 4.42 | High | 0.56 |
| Customer based sustainability outcomes | 4.38 | High | 0.47 |

*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 were utilized.*

Table 4 shows a High overall rating for Customer-Based Sustainability Outcomes (M = 4.38, SD = 0.47). Willingness to Recommend received the highest mean (M = 4.42, SD = 0.56), indicating that participants generally expressed willingness to recommend the selected informal food service establishments to others. This finding is consistent with Singh et al. (2021), who associated service and food quality with customer satisfaction and loyalty-related outcomes. Moreover, Intention to Continue obtained the lowest mean (M = 4.34, SD = 0.56), although it remained within the High category. The small difference of 0.08 between the highest and lowest means indicates generally favorable perceptions across the three dimensions. Khan et al. (2021) linked customer-related experiences with loyalty, while Padillo et al. (2022) identified food and service attributes as relevant to customer loyalty in Philippine restaurant settings.

Table 5 presents the multiple regression analysis examining whether Service Management Quality and Customer Relationship Practices significantly predict Customer-Based Sustainability Outcomes. The overall regression model was statistically significant, $F = 467.468$, $p < .001$, indicating that the two predictors, considered together, significantly predicted Customer-Based Sustainability Outcomes. The model yielded $R = 0.883$, $R^2 = 0.780$, and Adjusted $R^2 = 0.778$. The $R^2$ of 0.780 indicates that, within the analyzed sample and regression model, 78.0% of the variance in Customer-Based Sustainability Outcomes was accounted for by its linear relationship with Service Management Quality and Customer Relationship Practices. The adjusted $R^2$ of 0.778 was slightly lower after accounting for the number of predictors in the model. The remaining 22.0% of the variance was not accounted for by these two predictors and may reflect other variables not included in the model.

For Service Management Quality, the unstandardized regression coefficient was B = 0.327 (β = 0.351, t = 7.216, p < .001). Therefore, the null hypothesis stating that Service Management Quality does not significantly predict Customer-Based Sustainability Outcomes is rejected. Holding Customer Relationship Practices constant, a one-unit higher score in Service Management Quality was associated with an estimated 0.327-unit higher predicted score in Customer-Based Sustainability Outcomes. This positive predictive relationship indicates that higher assessments of service management quality were associated with more favorable customer-based outcomes among the participants.

For Customer Relationship Practices, the unstandardized regression coefficient was B = 0.496 (β = 0.575, t = 11.808, p < .001). Thus, the null hypothesis stating that Customer Relationship Practices does not significantly predict Customer-Based Sustainability Outcomes is rejected. Holding Service Management Quality constant, a one-unit higher score in Customer Relationship Practices was associated with an estimated 0.496-unit higher predicted score in Customer-Based Sustainability Outcomes. Customer Relationship Practices had a larger standardized regression coefficient than Service Management Quality (β = 0.575 versus β = 0.351), indicating a stronger relative contribution to prediction in this particular model and sample.

Overall, the findings indicate that both Service Management Quality and Customer Relationship Practices were significant positive predictors of Customer-Based Sustainability Outcomes. The results suggest that favorable service management and customer relationship practices are associated with higher customer trust, intention to continue patronizing, and willingness to recommend. However, because the study used a correlational and nonexperimental design, these findings should be interpreted as predictive associations and should not be taken as evidence of causal effects.

**Table 5**
**Regression Analysis of how Predictors of Service Management Quality and Customer Relationship Practices Predict Customer-Based Sustainability Outcomes**

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | T | Sig. |
| (Constant) | .779 | .120 | | 6.486 | .000 |
| Service management quality | .327** | .045 | .351** | 7.216 | .000 |
| Customer Relationship practices | .496** | .042 | .575** | 11.808 | .000 |
| Model Summary | | | | | |
| R =0.883 R2 = 0.780 Adj. R2 = 0.778 F= 467.468** p = .000 | | | | | |

***significant at 0.01 level*

Table 6 presents the mediation analysis examining the relationship between Service Management Quality and Customer-Based Sustainability Outcomes, with Food Quality specified as the mediator. The total effect of Service Management Quality on Customer-Based Sustainability Outcomes was significant (B = 0.7587). The direct effect

remained significant after including Food Quality in the model (B = 0.4624, SE = 0.0463, t = 9.98, p < .001, 95% CI [0.3711, 0.5537]). The indirect effect through Food Quality was also statistically significant (B = 0.2963, SE = 0.0492, 95% bootstrap CI [0.2078, 0.4004]). These results indicate partial statistical mediation.

The findings indicate that Food Quality statistically accounted for part, but not all, of the relationship between Service Management Quality and Customer-Based Sustainability Outcomes. Since the direct effect remained significant after Food Quality was included in the model, the relationship was not fully accounted for by the mediator. Because the study used cross-sectional data, this mediation pattern should not be interpreted as establishing that Service Management Quality causes changes in Food Quality, which then cause changes in Customer-Based Sustainability Outcomes.

**Table 6**
**Mediation Analysis of Food Quality on the Predictors of Service Management Quality and Customer-Based Sustainability Outcomes**

| Effect | B | SE | t | p | BootLLCI | BootULCI | Interpretation |
|---|---|---|---|---|---|---|---|
| Total Effect (Service Management Quality → customer-based sustainability outcomes. | 0.7587 | — | — | — | — | — | Significant |
| Direct Effect (Service Management Quality → customer-based sustainability outcomes) | 0.4624 | 0.0463 | 9.98 | < .001 | 0.3711 | 0.5537 | Significant |
| Indirect Effect (Service Management Quality → Food Quality → customer-based sustainability outcomes) | 0.2963 | 0.0492 | — | — | 0.2078 | 0.4004 | Significant |

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. Since the direct effect also remained significant, the findings support partial statistical mediation. The indirect effect (B = 0.2963, 95%

bootstrap CI [0.2078, 0.4004]) was smaller in magnitude than the direct effect (B = 0.4624), indicating that Food Quality accounted statistically for part of the relationship between Service Management Quality and Customer-Based Sustainability Outcomes. This result supports Food Quality as an intervening statistical variable in the estimated model, subject to the limitations of the cross-sectional research design.

Table 7 presents the mediation analysis for the relationship between Customer Relationship Practices and Customer-Based Sustainability Outcomes, with Food Quality specified as the mediator. The total effect was significant (B = 0.7408), indicating that Customer Relationship Practices had a significant overall association with Customer-Based Sustainability Outcomes in the study sample. This finding suggests that higher assessments of customer relationship practices were associated with more favorable customer-based outcomes.

**Table 7**
**Mediation Analysis of Food Quality on the Predictors of Customer-Based Sustainability Outcomes**

| Effect | B | SE | t | p | BootLLCI | BootULCI | Interpretation |
|---|---|---|---|---|---|---|---|
| Total Effect (Customer Relationship Practices → Customer-Based Sustainability Outcomes) | 0.7408 | — | — | — | — | — | Significant |
| Direct Effect (Customer Relationship Practices → Customer-Based Sustainability Outcomes) | 0.5452 | 0.0459 | 11.87 | < .001 | 0.4548 | 0.6356 | Significant |
| Indirect Effect (Customer Relationship Practices → Food Quality → Customer-Based Sustainability Outcomes) | 0.1956 | 0.0462 | — | — | 0.1085 | 0.2890 | Significant |

The direct effect remained significant after Food Quality was included in the model (B = 0.5452, SE = 0.0459, t = 11.87, p < .001, 95% CI [0.4548, 0.6356]). The indirect effect through Food Quality was also statistically significant because its bootstrap

confidence interval excluded zero (B = 0.1956, SE = 0.0462, 95% CI [0.1085, 0.2890]). This pattern is consistent with partial statistical mediation. The results suggest that Food Quality statistically accounted for part of the association between Customer Relationship Practices and Customer-Based Sustainability Outcomes. However, the findings do not establish temporal order or causality.

Table 7 shows significant total, direct, and indirect effects. The total effect was B Within the Social Exchange Theory perspective; customer relationship practices may be understood through the interactions and exchanges between customers and food service establishments. Positive customer experiences and perceived food quality may be associated with favorable customer evaluations, including trust, intention to continue patronizing, and willingness to recommend. This theoretical interpretation provides a basis for understanding the observed relationships but should not be presented as causal confirmation of the mediation model.

= 0.7408, and the bootstrap confidence interval for the indirect effect was [0.1085, 0.2890], excluding zero. The pattern is therefore consistent with partial mediation in the estimated statistical model. The indirect effect was statistically significant (B = 0.1956, 95% bootstrap CI [0.1085, 0.2890]), while the direct effect remained significant (B = 0.5452, $p < .001$). These findings support partial statistical mediation, subject to the limitations of a cross-sectional correlational design.

## Conclusions

The study concludes that the findings provide empirical support for the relevance of Social Exchange Theory in understanding customer-based sustainability outcomes in informal food service establishments. The results showed that Service Management Quality and Customer Relationship Practices were significant positive predictors of Customer-Based Sustainability Outcomes, while Food Quality partially mediated both relationships. The findings indicate that favorable service management practices, positive customer relationships, and food quality were associated with customer trust, intention to continue patronizing, and willingness to recommend. However, these findings should be interpreted within the study's limitations: the cross-sectional, descriptive-correlational design does not establish causal relationships; the use of self-reported measures may be subject to response bias; and the findings were based on 267 valid responses from customers of selected informal food service establishments in a rural Philippine setting, which may limit their generalizability to other food service establishments and locations.

## Recommendations

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

1. Owners and managers of informal food service establishments may strengthen service management practices by maintaining accurate orders,

organized service flow, and effective staff coordination. They may also monitor food quality to support favorable customer experiences.

2. Food service employees may maintain friendly and respectful interactions with customers, provide personalized attention, and respond promptly to customer needs. These practices may help support customer trust and continued patronage.

3. Informal food service establishments may regularly assess food quality by monitoring food freshness, taste, appearance, ingredient quality, consistency of preparation, and value for money. Customer feedback may be used to identify areas that need improvement.

4. Hospitality and business educators may incorporate service management quality, customer relationship practices, and food quality into practical learning activities and training programs. The findings may also serve as a local research example for students studying customer-based sustainability outcomes.

5. Local Government Units and tourism-related agencies may consider providing training and development programs for informal food service operators and employees, particularly in food quality management, customer service, and customer relationship practices.

6. Future researchers may examine the same variables across different municipalities, restaurant types, and hospitality establishments. Larger samples and probability-based sampling may be considered when feasible. Longitudinal or experimental research designs may also be used to examine temporal relationships, while other variables such as perceived value, price, dining environment, and customer loyalty may be explored in future studies.

## 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 from the study. Measures were taken to protect respondents' anonymity and the confidentiality of the collected research data. The authors declare no conflict of interest. Proper acknowledgment of sources was observed throughout the research process. Any institutional ethics review or approval should be reported, including the name of the approving institution and reference number, if applicable. Any required funding disclosure should also be included in accordance with the target journal's requirements.

## REFERENCES

Islam, T., Khan, M., Ghaffar, A., Wang, Y., Mubarik, M. S., Ali, I. H., Shahid, Z. A., Rehmani, M., & Sharma, A. (2023). Does CSR influence sustained competitive advantage and behavioral outcomes? An empirical study in the hospitality sector. Journal of Global Scholars of Marketing Science, 33(1), 107–132. https://doi.org/10.1080/21639159.2022.2098157

Khan, M. A., Yasir, M., & Khan, M. A. (2021). Factors affecting customer loyalty in the services sector. Journal of Tourism and Services, 12(22), 184–197. https://doi.org/10.29036/jots.v12i22.257

Konuk, F. A. (2019). The influence of perceived food quality, price fairness, perceived value and satisfaction on customers' revisit and word-of-mouth intentions towards organic food restaurants.

Journal of Retailing and Consumer Services, 50, 103–110. https://doi.org/10.1016/j.jretconser.2019.05.005

Padillo, C., Jr., Go, N., Manreal, P., Samson, S., Galli, B., Yamagishi, K., Promentilla, M. A., & Ocampo, L. A. (2022). Modelling the priority attributes of customer loyalty in Philippine single-dish restaurants. Journal of Modelling in Management, 17(4), 1432–1455. https://doi.org/10.1108/JM2-09-2020-0243

Rather, R. A., & Hollebeek, L. D. (2021). Customers' service-related engagement, experience, and behavioral intent: Moderating role of age. Journal of Retailing and Consumer Services, 60, Article 102453. https://doi.org/10.1016/j.jretconser.2021.102453

Sanjaya, C., & Mulyono, F. (2023). Modeling customer satisfaction and revisit intention towards Cocorico Restaurant. Jurnal Manajemen Maranatha, 23(1), 15–32. https://doi.org/10.28932/jmm.v23i1.7017

Shin, S., Shin, H. H., & Gim, J. (2023). How positive do testimonials on a restaurant website need to be? Impact of positivity of testimonial reviews on customers' decision-making. International Journal of Hospitality Management, 108, Article 103382. https://doi.org/10.1016/j.ijhm.2022.103382

Singh, G., Slack, N., Sharma, S., Mudaliar, K., Narayan, S., Kaur, R., & Sharma, K. U. (2021). Antecedents involved in developing fast-food restaurant customer loyalty. The TQM Journal, 33(8), 1753–1769. https://doi.org/10.1108/TQM-07-2020-0163

Sirimongkol, T. (2022). The effects of restaurant service quality on revisit intention in pandemic conditions: An empirical study from Khonkaen, Thailand. Journal of Foodservice Business Research, 25(2), 233–251. https://doi.org/10.1080/15378020.2021.1941560

Wen, H., Wong, I. K. A., Kim, S., Badu-Baiden, F., & Ji, K. M. (2021). A multilevel synthesis of subjective and objective measures of foodservices in the experience process. International Journal of Hospitality Management, 99, Article 103059. https://doi.org/10.1016/j.ijhm.2021.103059

**APA Citation:**

Anoc, A. P., & Chavez, C. C. (2026). FOOD QUALITY AS MEDIATING VARIABLE ON THE PREDICTORS OF CUSTOMER-BASED SUSTAINABILITY OUTCOMES AMONG INFORMAL FOOD ESTABLISHMENTS, FOOD SERVICES ESTABLISHMENTS. Ignatian International Journal for Multidisciplinary Research, 4(11), 560–573. https://doi.org/10.5281/zenodo.24156952

*asteria.anoc@lccdo.edu.ph*
*cyril.chavez@lccdo.edu.ph*