

Article

# Application of the New Importance–Performance Analysis Method to Explore the Strategies of Rural Outdoor Dining Experiences in Taiwan

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**Abstract:** Taiwan is an island where the city and nature combine to become the most beautiful open-air museum in the world, known as Formosa. With climate change and industrial development as the main changes in consumption behavior, the integration of ecology, the environment, and agriculture into food culture is gradually becoming valued in Taiwan. This study explores the quality of the rural outdoor dining experience in Taiwan; therefore, questionnaires were distributed to outdoor dining attendees from the north, central, south, and east, and we obtained 396 valid questionnaires. The rural outdoor dining satisfaction experience can be improved using the innovative New Importance–Performance Analysis (NIPA) model, which is based on the original IPA methodology but modified by the performance of the risk management judge. Additionally, we applied the zone of tolerance (ZOT) to evaluate the quality of priority and the importance–performance analysis (IPA) to make innovation decisions. The model also encourages decision-makers to consider environmental factors and customer feedback. It has not only been used to measure customer satisfaction, assess customer behavior, identify customer needs, and determine areas where quality needs to be improved, but it can also be used to measure the success of business decisions and identify potential areas for improvement. The results show that rural outdoor dining experiences in Taiwan have led to the development of a low carbon economy and a new business model for operators in order to follow the result of NIPA and develop service marketing strategies.



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**Keywords:** dining experience; New Importance–Performance Analysis (NIPA); zone of tolerance (ZOT); rural outdoor dining

## 1. Introduction

Taiwan is an island where the city and nature combine to become the most beautiful open-air museum in the world, known as Formosa. It is situated on a complex convergent boundary between the Eurasian and Pacific plates, which causes a spectacular landscape with astounding mountain ranges and grand valleys. Therefore, Taiwan has a great mixture of urban metropolises and nature, which is one of the most beautiful open-air landscapes in the world (Chen et al. 2015). Today, climate change and industrial development have created a great change in consumption behavior as well as the emerging business model of the outdoor dining experience. Subsequently, changes in consumption behavior could put more pressure on foodservice operators to provide their customers with superior dining experiences. To have lasting success, operators should adopt strategies to improve the customer experience, thus increasing perceived customer satisfaction (Tussyadiah 2016).

As attracting new customers costs up to five times the cost of retaining existing customers, customer satisfaction is seen as the key to the survival of hospitality organizations. Hence, customer satisfaction is crucial to increasing customer retention and company profitability (Richardson et al. 2019). There is a positive relationship between customer satisfaction, repurchase intention of repurchase, and the spread of positive word of mouth in the future (Ryu and Han 2010). Customer expectations and adequate service could be measured

by service quality (Grönroos 1984). The two levels of customer expectations are desired service and adequate service (Chen et al. 2018). Desired service means the ideal service that customers wish for; adequate service means that customers can accept the worst service; and the difference between them is the zone of tolerance (ZOT) (Parasuraman et al. 1991; Zeithaml et al. 1993). The ZOT concept provides additional valuable information that allows companies to gauge how customers perceive each service item (Johnston 1995). Therefore, to evaluate customer perceptions of service quality, operators must develop effective strategies with limited resources that prioritize the quality of the service to improve. The application of ZOT to assess the quality of the priority of improving the service of attributes is another matter of concern.

The regular method for prioritizing attributes to improve service quality is importance–performance analysis (IPA), which evaluates the performance of consumers’ preferences for product attributes in the process from expectation to experience. This illustrates the importance of quality attributes and formulates the classifications of specific services based on “importance” and “performance” (Bacon 2003; Chen 2014). Although the IPA is an effective means of attribute prioritization, its applicability is limited. Several scholars have suggested further clarification of the fundamental applications of IPA to assess service quality (Matzler et al. 2003). In addition, many researchers have refined IPA in combination with other analytical methods and defined value structures and qualitative measures for decision-making. Therefore, this study is based on previous theories, using the New Importance–Performance Analysis (NIPA) measurement procedures and zone of tolerance to judge risk management performance, which proposes a new method of the original IPA to assess service quality attributes and prioritize future improvements (Huang et al. 2019; Li et al. 2022). Consequently, this study follows the New Importance–Performance Analysis (NIPA) to analyze the emerging business model of rural outdoor dining experiences in Taiwan to complement the findings of theoretical and practical implications. The purposes are as follows:

- (1) To explore the background and recreational characteristics of consumers participating in rural outdoor dining experiences.
- (2) To explore the discrepancy between demographic variables and customer satisfaction.
- (3) To explore development strategies for rural outdoor dining experiences through NIPA.
- (4) To provide practical suggestions for the development of outdoor dining experiences in rural communities in Taiwan.

## 2. Literature Review

### 2.1. Rural Outdoor Dining

Dining plays a crucial role in rural tourism, creating more employment opportunities for locals and promoting economic development (Findlay et al. 2000; Lundmark 2006). Research shows that restaurants that support local food and organic products have a positive impact on customers, with a three-time higher likelihood of choosing restaurants that source local products compared to those that do not offer local products (Scozzafava et al. 2017). Rural dining serves as a promotion of regional identity, meeting the specific needs of various rural visitors (Bessière 1998), and it can add value to tourism activities and attract a wide range of potential consumers (Privitera et al. 2018). Dining experiences not only help to understand the construction of the consumer experience, but they also help to understand the appropriateness of tourism awareness and consumption space (Kiatkawsin and Sutherland 2020). Agriculture is mediated between humans and nature, leading to the diversification of rural landscapes (Natori and Chenoweth 2008). Rural landscapes are of significant value for rural development as well as for rural tourism, which is closely related to its environment and landscape (Torquati et al. 2017). According to multiple studies, the traditional rural landscape, with its historical and cultural value and beauty, gives rural areas uniqueness, which in turn influences the choice of travel destinations (Carpio et al. 2008). Customers in rural areas often prefer to experience natural landscapes (Yang et al. 2022). Factors such as quality and facilities, image and atmosphere, and scenic elements influence consumer

satisfaction with rural village restaurants (Yang and Luo 2021). As the interest of urban residents in rural areas grows, rural landscapes promote the development of rural tourism and highlight their economic value (Brouder et al. 2015; Torquati et al. 2017). Thus, the outdoor dining environment in rural areas plays an important role in the development of rural restaurants. This study focuses on the outdoor dining experiences in rural areas of Taiwan to provide findings that serve as supplementary theoretical and practical significance.

## 2.2. Dining Experience

Dining experience refers to the various models, frameworks, and concepts used to measure the quality of a dining service experience, to understand customers' perceptions and expectations, and to identify areas where dining service experience can be improved. It has a significant impact on customer satisfaction and loyalty, and food quality, service, atmosphere, and presentation all play a role in creating a positive dining experience. The dining experience is more than just the food and service; it is also about the overall atmosphere of the restaurant, with the design, lighting, music, and even smell all playing a role in creating a positive dining experience. The importance of creating a unique and memorable experience for customers rather than simply meeting their basic expectations means that restaurants must pay attention to all these elements to create a positive and memorable dining experience for their customers (Namin 2017). The dining experience is influenced by various factors such as food, service, atmosphere, value, and the overall ambience of the restaurant (Kleinhans et al. 2016). Some scholars who studied the quality factors of the dining experience, for example, the casual dining experience, indicated that the casual dining experience has four dimensions, namely, food aspects, interaction quality, physical environment, and service outcome (Hussein 2018), and customer satisfaction with the dining experience was positively correlated with the willingness to extend the experience (El-Said et al. 2021). Other scholars have expressed that diverse and specific dimensions should be explored to measure service quality, including food, service, atmosphere, view, reputation, and price (Oh and Kim 2020). Customers are more likely to have a positive dining experience when they perceive a high level of service quality, a pleasant atmosphere, and good value for money (Ying et al. 2018). In addition, the restaurant should pay attention to the design and management of the atmosphere to create a positive dining experience for its customers and an atmosphere that aligns with its brand image and target market. Thus, businesses should pay attention to all these factors in order to create a positive dining experience for their customers.

Service experiences are based on tangible objects and intangible behaviors (Qiu et al. 2020). The tangible elements of service are the physical environment, equipment, and materials that can have a significant impact on perceptions of service quality; that is, the intangible factors of employees, the service process, and the general atmosphere can also greatly influence the service experience, which is determined by factors throughout the service system, and it is important to consider both tangible and intangible elements when designing and providing services in the restaurant industry. Some scholars have pointed out that service experiences can have a significant impact on customer satisfaction and loyalty and that overall business performance is influenced by a variety of factors, including the skills and attitudes of service employees, the physical environment in which service is provided, and the overall design of the service process. Furthermore, authors have highlighted the importance of understanding the specific needs and expectations of different segments of the customer to deliver effective service experiences (Shobri 2018). Different atmospheric elements such as lighting, music, color, and fragrance can influence consumer perceptions and behavior, as well as influence consumer emotions that will affect their satisfaction and revisit intentions (Tsaour and Lo 2020). Other scholars have stated that a memorable dining experience includes exquisite and delicious cuisine, excellent service behavior, a unique atmosphere, an amazing physical environment, and high perceived value, which are important factors in future dining decisions (Mehravian and Russell 1974). The physical environment can affect an individual's emotional state, which triggers the in-

dividual's avoidance behavior or approach alternately (Guzel and Dortyol 2016). The most powerful sense in creating memories is the visual sense, which can evoke feelings of love, happiness, well-being, and other soft expressions (Piqueras-Fiszman and Jaeger 2015). Thus, food itself is a key element in creating memorable experiences that involve the five senses that evoke emotional, cognitive, and physical memory (Cao et al. 2019; Kiatkawsin and Sutherland 2020).

Research shows that the dining experience scale satisfactorily measures service performance and predicts customers' loyalty intentions (Anderson et al. 1994). Price can be indicative of quality, which customers internalize as an expectation when they evaluate their experience after consumption to determine their satisfaction later (Konuk 2019; Hanaysha 2016), and price quality patterns significantly affect intention and participation, with satisfaction and participation considered the key mediators (Ji et al. 2018). In other words, customer satisfaction is significantly affected by price in the hospitality industry. Customer experiences constitute a key aspect of a business's success (Jeong and Jang 2011). Businesses must prioritize creating positive experiences for their customers to build loyal relationships and ultimately drive revenue growth (Tarrant and Smith 2002). Thus, service experiences are considered a key aspect of business success by many researchers. Focusing on service experiences can help businesses improve customer satisfaction, build loyal relationships, and drive revenue growth. Enhancing the service experience through technology, personalization, and understanding customer needs and expectations are considered key strategies to achieve it.

### 2.3. New Importance–Performance Analysis

The regular method for prioritizing attributes to improve service quality is the importance–performance analysis (IPA), which evaluates the performance of consumers' preferences for product attributes in the process from expectation to experience. This illustrates the importance of quality attributes and formulates the classifications of specific services based on "importance" and "performance" (Bacon 2003; Chen 2014). Several scholars have suggested further clarification of the fundamental applications of IPA to assess service quality (Matzler et al. 2003), and other researchers have refined IPA in combination with other analytical methods and defined value structures and qualitative measures for decision-making (Tonge and Moore 2007; Lee and Cheng 2018; Bruyere et al. 2002). For example, scholars have suggested that we identify the gap between the customer's perceptions of importance and the service provider's perceptions of the performance of the attributes or characteristics of a product or service to identify and understand the reasons behind these gaps to develop strategies or close them (George 2013). A modified version of IPA to express customer satisfaction can be represented by a third dimension in the IPA matrix, which allows service providers not only to identify areas for improvement but also to understand the level of customer satisfaction with different attributes or characteristics of the service (Tsai et al. 2022). Developing the competitive importance–performance analysis and gaps analysis (CIPGA) gap in each service attribute is developed through a functional transformation to improve service quality in a highly competitive market (Cheng et al. 2021), as well as based on the differentiation strategy of the competitive advantage theory (CAT) and PZB models to modify the IPA model in combination with the performance and service evaluation items of services to effectively establish sustainable competitive advantages for enterprises (Bakhtiar et al. 2017). To help service providers prioritize their efforts, some scholars proposed an extension of traditional importance–performance analysis by incorporating the concept of the zone of tolerance in their model. They addressed the limitation by incorporating a third dimension, which represents the tolerance zone within customers who are still satisfied with the service (Hawes and Rao 1985). Therefore, the modified IPA allows service providers to understand not only the importance and performance of different attributes or characteristics of the service but also the level of tolerance customers have for variations in these attributes or characteristics. It helps service

providers identify attributes or characteristics that are important to customers but have a lower tolerance level and prioritize their efforts accordingly.

The New Importance–Performance Analysis (NIPA) model was proposed to improve the problems discovered in the “importance–satisfaction analysis” model for arrangement managers to identify a strategic position and develop a service improvement plan for each attribute of the service. With a two-dimensional matrix, IPA indicates the importance and performance of various attributes or characteristics of a product or service (Parasuraman et al. 1994). The matrix is divided into four quadrants, with the horizontal axis representing performance and the vertical axis representing importance. The concept of multiple expectations and tolerance zones in service quality, which means measuring service quality, is complex, as customers can have multiple expectations for service. This approach enables service providers to understand the relative importance of different attributes of the service and effectively allocate resources to meet or exceed customer expectations (Parasuraman 2004). The range of acceptable service performance that customers are willing to tolerate before becoming dissatisfied, which is determined by the customer’s expectations, past experiences, and perceptions of the service, is the tolerance zone (Parasuraman et al. 1985; Hansen 2014). Therefore, in the NIPA model, customers are invited to evaluate the degrees of these properties in terms of “importance”, “performance”, and “tolerance”. The measurement procedure for the NIPA model is as follows (Li et al. 2022).

1. Service quality is developed, as are the questionnaire items.
2. Customers are invited to evaluate the degrees of these properties in terms of “importance”, “performance”, and “tolerance”. “Importance” refers to the perceived importance of the properties of a product or service for the preferences of customers. “Performance” refers to the product or service of performance for the supplier. “Tolerance” refers to the level that customers can allow between “importance” and “performance”.
3. Compute the mean of the items; importance is on the horizontal axis, and performance is on the vertical axis. The degree of service quality is a coordinate, and the value is represented in a two-dimensional space.

The NIPA model has been proposed to present a structured measurement process to produce different results and illustrious managerial implications. For example, researchers who applied the NIPA with carry out research on the public bike system showed the change in bike lanes in Taichung City in Taiwan and made iBike users willing to brave the road, thus improving user satisfaction and increasing the use of public bicycles (Huang et al. 2019). Another example was that researchers who used the NIPA to take the wedding garden to fill the gap in consumer behavior research proposed the current competitive market strategy of the management company and verified the operating improvement policy to consult for the business operation model (Li et al. 2022). Consequently, this study followed the New Importance–Performance Analysis (NIPA) to analyze the emerging business model of the outdoor dining experience in Taiwan to complement the findings of the theoretical and practical implications.

### 3. Research Methods

#### 3.1. Conceptual Model

This study proposes the New Importance–Performance Analysis (NIPA) to develop a service improvement plan for each attribute of the service. According to the NIPA model of the service quality evaluation formula in PS (perceived service)–ES (expected service), if  $PS - ES = 0$  in the service quality evaluation formula, which means that the expectation of service matches their need, customers are satisfied. If  $PS - ES > 0$  means excessive supply to demand and satisfied with quality, customers are satisfied, which constructs the upper limit by parameter  $v_1$  of risk management performance, such as line  $fe$ . If  $PS - ES < 0$  means lower than expectation, customers cannot accept the service, and quality should be improved. The lower limit is constructed by parameter  $v_2$  of risk management performance,

such as line bc. Therefore, the NIPA model includes three zones: Zone A, formed by b5c; Zone B, formed by abcdef; and Zone C, formed by f5e. The research model and the NIPA model are shown in Figures 1 and 2.

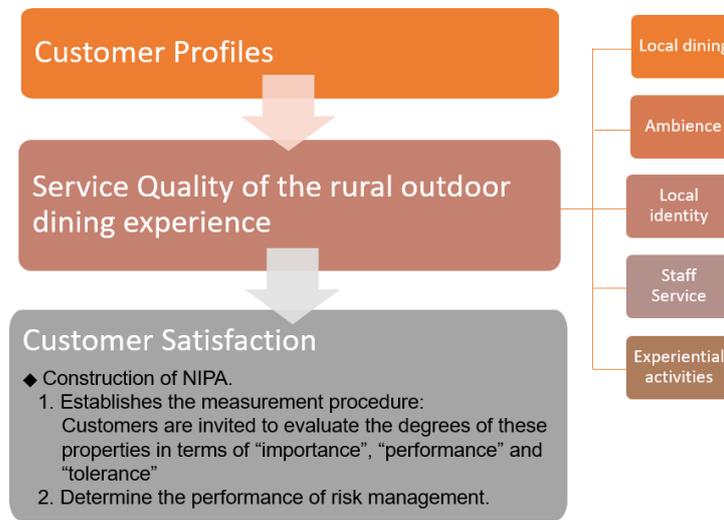


Figure 1. Research model.

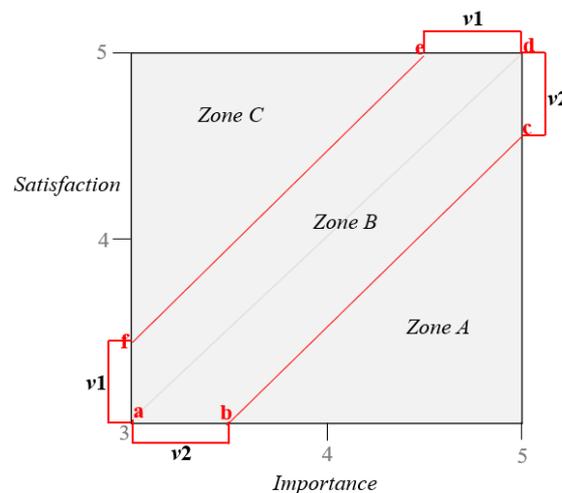


Figure 2. NIPA model.

To determine whether risk management performance matches the standard, this study follows the NIPA model judgment principles.

1. *Zone A*: primary improvement, high importance, and low satisfaction.

These items in the zone are the priority items for service quality that should be improved. Staff, materials, and capital should be immediately invested to readjust strategy and procedures. In addition, the survival of the operators will be threatened.

2. *Zone B*: maintenance, and scores of importance and performance are high.

The service quality in this part should be maintained and accelerated as the company’s competitive advantage. There are no items that require immediate improvement. However, ongoing monitoring should maintain the current race condition.

3. *Zone C*: excessive development, lower importance, and higher satisfaction.

These items in the zone are of excessive importance and development, which means that operators could waste resources. Therefore, resources can be reorganized and reapplied to improve other items of the most important quality of service.

### 3.2. Instruments and Measures

This study explores the quality of the outdoor dining experience in Taiwan; therefore, questionnaires were distributed to outdoor dining attendees. The dining experience scale was the result of combining, refining, and discovering, which are the existing and new dimensions. All items were formed from the SERVQUAL, DINESERV, and Kiatkawsin and Sutherland scales (Hansen 2014; Kiatkawsin and Sutherland 2020). In addition, experts and scholars in the field of restaurant and leisure management reviewed the items and reported their conclusions on a 23-item scale of six constructs. Next, this study explained the purpose and method of completion of the questionnaires. Part 1 investigates the subjects' gender, age, occupation, education, income, and dining companions. According to the content, it identifies the characteristics and distribution of outdoor dining customers. Part 2 is the service quality questionnaire items and includes five dimensions to measure customer cognition. To understand the degree of customer satisfaction between importance and satisfaction, the properties of the 23 items included tolerance to measure the overall service experience (Csurgó and Smith 2022; Park and Widyanata 2022). The 23 items are shown in Table 1.

**Table 1.** Constructs and items.

Constructs	Measurement Items
Local dining	1. The dining design integrates local characteristics.
	2. Providing a satisfying dining.
	3. The dining narration enhances the positive experience.
	4. Dining can satisfy the customer's sense of ritual.
	5. Hope to participate in similar events again.
Ambience	6. The dining environment integrates visual effects.
	7. The dining environment provides a unique view.
	8. The overall dining environment of space design and moving lines.
	9. Combing the dining environment and the sensory experience in the outdoors.
Local identity	10. The local dining experience helps to understand the food.
	11. The local dining experiences are eco-friendly.
	12. The local dining experiences help build a sense of community
	13. The local dining experience attracts tourists and boosts the economy.
Staff service	14. Service staff who are familiar with customer needs.
	15. Providing special attention to customers and helping to solve problems accurately.
	16. Service staff with enough professional knowledge to answer customer questions.
	17. Maintain a cordial and enthusiastic service attitude.
Experiential activities	18. Increasing the richness and value of the itinerary with experiential activities.
	19. Comprehending the cultural field through experiential activities.
	20. Comprehending local ecology through experiential activities.
	21. The experiential activities staff have smooth arrangements.
	22. The experiential activities staff are enthusiastic.
	23. The experiential activities of the staff are professional.

The service quality evaluation formula is as follows (Namin 2017):

$$\text{Service quality (SQ)} = \text{perception of service (PS)} - \text{expectation of service (ES)}$$

The perception of service (PS) is the customer's evaluation of the actual service received, while the expectation of service (ES) is the customer's prior expectation of the service to be received.

This formula highlights that service quality is a function of how well the service delivered meets or exceeds customer expectations. If a customer's perception of the service

received is equal to or greater than their expectations, they will perceive the service to be of high quality. However, if the perception of the service received is less than the expectation, the customer will perceive the service to be of low quality, which shows as follows:

- (1) If  $PS - ES > 0$ , positive, customers are satisfied, which means excessive supply to demand and satisfied with quality.
- (2) If  $PS - ES < 0$ , negative, customers cannot accept it, which means it is lower than expected, and the quality should be improved.
- (3) If  $PS - ES = 0$ , equal, customers are satisfied, which means their expectation of service matches their need.

## 4. Results

### 4.1. Sampling

This study explored the quality of the outdoor dining experience in Taiwan; therefore, a stratified random sampling research method was adopted from participants in government-subsidized rural community consumers who participate in outdoor dining activities in the north, central, south, and east of Taiwan. After eliminating items with incomplete or repetitive responses, this study obtained 396 valid questionnaires.

The results of the profile characteristics highlighted that males made up 56.1% and females 43.9% (Table 2). Most of the respondents were 26–35 years old (34.1%). Regarding education, most had a college degree (43.4%), and an education below high school was the lowest (22%). Regarding monthly income, NTD 40,000–50,000 was the highest, at 42.2%; below NTD 20,000 was the lowest, with a percentage of only 4.3%. Respondents were more likely to enjoy outdoor dining with their friends (56.1%), followed by couples (21.7%) and their family (12.6%).

**Table 2.** Demographic characteristics of the respondents.

Variables	Categories	N	Percentage %
Gender	Male	222	56.1
	Female	174	43.9
Age	Under 25	36	9.1
	26–35	136	34.3
	36–45	53	13.4
	46–55	87	22.0
	Above 50	84	21.2
Education	Below high school	87	22.0
	College	172	43.4
	Master	137	34.6
Income	Below 20,000	17	4.3
	20,001–30,000	19	4.8
	30,001–40,000	51	12.8
	40,001–50,000	167	42.2
	Above 50,001	142	35.9
Companions	Alone	38	9.6
	Couples	84	21.2
	Family	51	12.9
	Friends	223	56.3

#### 4.2. Empirical Analysis and Results

A reliability analysis measures the consistency of the content of the item on the scales and the stability of the scale measurements for dimensions. This research applied Cronbach’s  $\alpha$  value to verify the consistency of the items. According to Kassarijan (1977), a score of more than 0.8 is considered reliable (Kassarijan 1977). The questionnaire covers five dimensions: dining (five items), ambience (four items), local identity (four items), staff service (five items), and experiential activities (five items). The empirical analytical result shows that the Cronbach’s  $\alpha$  of the scales was 0.825–0.955, which means that the consistency of the scale content was high and the questionnaire was highly reliable. Regarding validity, the content of this research questionnaire was based on the relevant theories referring to the contents of the related literature and includes the opinions of the scholars. Therefore, this study had a considerable degree of validity in its content. The results of the reliability analysis are shown in Table 3.

**Table 3.** Summary of reliability analysis.

Construct	Number of Items	Cronbach’s $\alpha$ Value
Dining	5	0.825
Ambience	4	0.834
Local identity	4	0.828
Staff service	5	0.955
Experiential activities	5	0.889

To understand the discrepancy between demographic variables and customer satisfaction, this study performed an independent *t*-test and an ANOVA analysis. The results indicate that there were no significant differences between men and women and their satisfaction with “dining” ( $F = 1.375, p > 0.05$ ), “local identity” ( $F = 0.452, p > 0.05$ ), “staff service” ( $F = 3.198, p > 0.05$ ), and “experiential activities” ( $F = 6.440, p > 0.05$ ). Ambience ( $F = 108.668, p < 0.05$ ) was significantly different between men and women. In terms of the environment, the satisfaction of men ( $M = 4.51$ ) was higher than that of women ( $M = 4.35$ ) with the new outdoor dining experience in rural travel.

Age, education, income, and companions are variables with more than three groups, and this study applied the analysis of variance (ANOVA) to test whether they have significantly different effects on customer satisfaction in rural travel. The results showed that age, income, and companions have significant differences in terms of customer satisfaction in rural travel, indicating that the outdoor dining experience in Taiwan has formed a new business model and that operators should follow the NIPA result to develop service marketing strategies. The results of the *t*-test and ANOVA in terms of age, education, income, companions, and customer satisfaction variables are summarized in Table 4.

**Table 4.** Demographic variables of the *t*-test and ANOVA analysis.

Variables	Gender		Age		Education		Income		Companions	
	F-Value	p-Value	F-Value	p-Value	F-Value	p-Value	F-Value	p-Value	F-Value	p-Value
Local dining	1.375	0.875	45.936	0.000 *	13.711	0.000 *	34.714	0.000 *	7.705	0.000 *
Ambience	108.668	0.002 *	74.668	0.000 *	11.043	0.000 *	39.864	0.000 *	22.705	0.000 *
Local identity	0.452	0.916	13.861	0.000 *	5.561	0.004 *	22.846	0.000 *	10.986	0.000 *
Staff service	3.198	0.163	20.690	0.000 *	0.830	0.437	11.640	0.000 *	11.608	0.000 *
Experiential activities	6.440	0.146	64.161	0.000 *	2.331	0.099	41.881	0.000 *	21.495	0.000 *

Notes: \*  $p < 0.05$ .

### 4.3. NIPA of Satisfaction with Service

This study adopts NIPA, where importance is the x-axis and satisfaction is the y-axis. According to the service quality evaluation formula, if excessive supply-to-demand and customers are satisfied with the quality, show the result of  $PS - ES > 0$ . If the perception of the service received is less than the expectation, the customers cannot accept the service and the quality should be improved, as shown by the result of  $PS - ES < 0$ . In the questionnaire survey, the result of the tolerance degree constructs a parameter of the NIPA model for risk management performance, the upper limit is  $NIPA(v1)$ , and the lower limit is  $NIPA(v2)$ . This study constructs a parameter of  $v1 = 0.4$  for the upper limit of risk management performance and a lower limit of  $v2 = 0.38$ . The NIPA model is shown in Figure 3, which includes three zones: Zones A, B, and C.

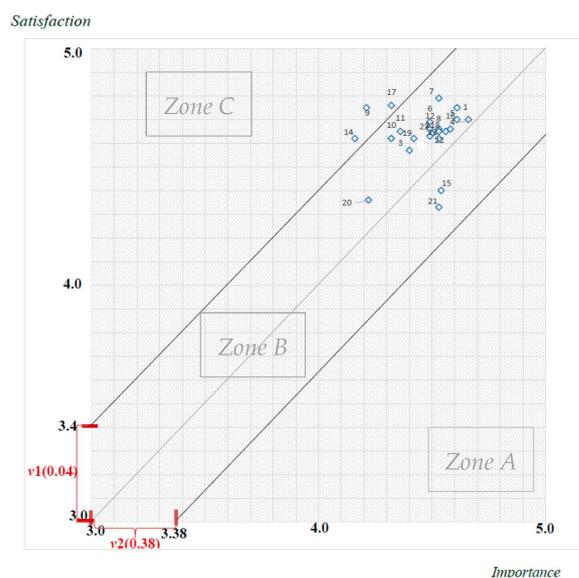


Figure 3. NIPA of satisfaction with service.

**Zone A:** primary improvement; no items fall into this area. In this area, items should be given priority for improvement that are of high importance and whose satisfaction is low. Operators should immediately invest in personnel, materials, and capital to adjust tactics and sequence. Beyond that, it might threaten the company’s existence.

**Zone B:** maintenance, including 20 items. The dining design integrates local characteristics, 1; providing a satisfying dining, 2; the dining narration enhances the positive experience, 3; dining can satisfy the customer’s sense of ritual, 4; hope to participate in similar events again, 5; the dining environment integrates visual effects, 6; the dining environment provides a unique view, 7; the overall dining environment of space design and moving lines, 8; the local dining experience helps to understand the food, 10; the local dining experiences are eco-friendly, 11; the local dining experiences help build a sense of community, 12; the local dining experience attracts tourists and boosts the economy, 13; providing special attention to customers and helping to solve problems accurately, 15; service staff with enough professional knowledge to answer customer questions, 16; increasing the richness and value of the itinerary with experiential activities, 18; comprehending the cultural field through experiential activities, 19; and comprehending local ecology through experiential activities, 20. The experiential activities staff have smooth arrangements, 21; the experiential activities staff are enthusiastic, 22; and the experiential activities of the staff are professional, 23.

**Zone C:** excessive development, including the following three items: combing the dining environment and the sensory experience in the outdoors, 9; service staff who are familiar with customer needs, 14; and maintain a cordial and enthusiastic service attitude, 17. Items in the zone are of the least importance and the highest satisfaction. Operators

need to reapply to improve other items of the most important quality of service without expending too many resources in the zone.

## 5. Conclusions and Suggestions

Taiwan is an island where high variations in the climate conditions produce a great biodiversity of vegetation types. The perfect combination of Taiwan's city and nature can be seen as the most beautiful open-air museum in the world, known as Formosa. Today, climate change and industrial development have caused a great change in consumption behavior as well as the emerging business model of the new local outdoor dining experience from farm to fork in Taiwan. Therefore, this study explored the quality of the local outdoor dining experience in Taiwan; therefore, questionnaires were distributed to outdoor dining attendees from northern, central, southern, and eastern Taiwan. This study obtained 396 valid questionnaires from outdoor dining attendees. The questionnaire design was based on service quality combined with the zone of tolerance for modification and measurement, and according to the characteristics of the outdoor dining attendees, they were modified as appropriate items, including 23 items of service. The scale makes an important theoretical contribution in practice, which is in the field of local outdoor dining experiences in the study of service quality. Furthermore, the local outdoor dining experience scale includes the local dining experience and activity experience to measure the uniqueness of the environment and the local characteristics of outdoor dining; this is what other scales lack, particularly the emerging business model of local outdoor dining. This study conducted three analyses according to the developed zones of NIPA. Based on a previous analysis, this study summarized the importance and performance of local outdoor dining customers.

The results show that the quality of service should be maintained and accelerated as the company's competitive advantage, including the dining design that integrates local characteristics, provides a satisfying dining, the dining enhances the positive experience, dining can satisfy the customer's sense of ritual, the hope to participate in similar events again, the dining environment integrates visual effects, the dining environment provides a unique view, the overall dining environment of space design and moving lines, the local dining experience helps to understand the food, the local dining experiences are eco-friendly, the local dining experiences help build a sense of community, the local dining experience attracts tourists and boosts the economy, providing special attention to customers and helping to solve problems accurately, service personnel with enough professional knowledge to answer customer questions, increasing the richness and value of the itinerary with experiential activities, comprehending the cultural field through experiential activities, comprehending local ecology through experiential activities, the experiential activities staff have smooth arrangements, the experiential activities staff are enthusiastic, and the experiential activities of the staff are professional. The results mean that specific tactics are needed to maintain competitiveness, and operators need to rethink other projects that improve the most important quality of service without spending too much of their resources, including a combination of the dining environment and the sensory experience in the outdoors, service staff who are familiar with customer needs, and maintaining a cordial and enthusiastic service attitude.

The results are consistent with the concept proposed by Dewey, that "knowledge is only one part of an individual's experience", which stated that people also have experiences related to feelings, sensory perceptions, and actions (Dewey 1925). For example, dining design that integrates local characteristics, provides a satisfying dining, the dining enhances the positive experience, dining can satisfy the customer's sense of ritual, as well as the overall dining environment of the design of the space, the local dining experience helps to understand the food, the local dining experiences are eco-friendly, the local dining experiences help build a sense of community, and the local dining experience attracts tourists. The results are also consistent with the Act Marketing targets physical behaviors, lifestyles, and interactions provided by Schmitt (1999): experiences that help create value are not so much about selling a memorable experience as about getting the customer to experience it

in a great way, which comes from all the moments connected to the activity, even exceeding the expectations of the customers (Schmitt and Zarantonello 2013). For example, service personnel with enough professional knowledge to answer customer questions, providing special attention to customers and helping to solve problems accurately, increasing the richness and value of the itinerary with experiential activities, understanding the cultural field through experiential activities, comprehending local ecology through experiential activities, the experiential activities staff have smooth arrangements, the experiential activities staff are enthusiastic, and the experiential activities of the staff are professional.

With the significant changes in consumer behavior driven by climate change and industrial development, the integration of ecology, environment, and agriculture into the diet culture is gradually gaining importance in Taiwan. Therefore, providing personalized services to improve the customer experience is important, such as customizing menu items based on dietary restrictions and preferences, collaborating with local farmers to acquire fresh seasonal agricultural products for menu items, offering dishes featuring seasonal ingredients, and showcasing the flavors of the season. Additionally, working with local chefs to create unique menus using local seasonal ingredients and educating customers about the benefits of local and seasonal ingredients and how they can have a positive impact on their health and the environment. Creating farm-to-table menus in restaurants and using fresh ingredients to further enhance personalized experiences is an emerging business model in rural areas of Taiwan.

In terms of policy, the results are consistent with the promotion guidelines of the Taiwanese Food and Agriculture Education Law (TFAEL), including supporting identification with local agriculture, cultivating the concept of a balanced diet, inculcating the idea of preserving food and reducing waste, passing on and innovating the dietary culture, as well as improving the links between diet, environment, and agriculture (Taiwanese Food and Agricultural Education Law (TFAEL) 2022). Furthermore, promoting strategic management in rural areas based on dining experience to support the priority consumption of locally produced seasonal agricultural products can effectively advance the sustainability compatibility of TFAEL (Huang et al. 2023).

In practice, compared to the general indoor environment, there are obvious differences in the five senses of the outdoor dining experience, which is why developing dining products that combine creativity and ingenuity based on consumer characteristics will improve the overall service quality. Operators may employ natural, cultural, and industrial characteristic spaces through the creation of experiential spaces and effectively reduce consumer negative reviews and higher expectations. They could also combine outdoor dining experiences with natural materials, woodworking, ceramics, and textile dyeing crafts to effectively create a flowing consumer experience. In addition, a tour guide could explain the story of the ingredients before outdoor dining, explaining that the ingredients are locally produced and consumed, which contributes to the development of a low-carbon economy. For Taiwan islands in Asia, the landscape-integrated consumption experience model will become a new business model for the development of dining experience products.

## 6. Limitations and Future Research Directions

The limitations of this study are as follows: First, the consumers evaluated in this investigation are usually related to the organizer's interpersonal relationship, a consumer group formed by word of mouth, not an unintended audience. The results of the study are therefore not suitable for extrapolating to an unintended audience. Second, the data for this study were collected from four different host institutions and environments in Taiwan, including national scenic areas in forest areas, outdoor coastal dining tables in coastal recreational areas, and around traditional buildings in agricultural landscapes. Therefore, this study only discusses the outdoor landscape and catering products displayed in the research case and is not applicable to interpreting the dining environment of the general catering industry. Third, this study explored the outdoor dining environment, which is accompanied by factors such as seasonal weather changes and an unstable external

environment. This state can cause tourists to feel psychologically unstable, leading to partial estimation errors.

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