Vol 14, Issue 2, (2024) E-ISSN: 2222-6990

# Shortage of Employees At Nasi Kandar Restaurant in Penang: Expectations and Customer Satisfaction

Fatin Farzana binti Nasoruddin, Joesri bin Mohamad Saber, Azlan bin Salim, Mohd Zoolfadli bin Ibrahim, Khairil Anuar bin Bahari & Noorsa Riza bin Johari

Faculty of Hotel and Tourism Management Universiti Teknologi MARA Cawangan Pulau Pinang 13500 Permatang Pauh, Pulau Pinang, Malaysia Email: joesr630@uitm.edu.my

**To Link this Article:** http://dx.doi.org/10.6007/IJARBSS/v14-i2/20807 DOI:10.6007/IJARBSS/v14-i2/20807

Published Date: 12 February 2024

#### Abstract

Several Nasi Kandar establishments have hired foreign workers. Since the COVID-19 outbreak, many foreign workers have returned to their respective countries of origin. However, only a small number returned after the pandemic subsided and the government began allowing reentry into the country. According to the President of Indian Muslim Community Organization Malaysia (iMcom), Mohamed Rizwan Abdul Ghafoor Khan, the number of workers in Nasi Kandar restaurants had already been reduced to 20,000 prior to the outbreak of the COVID-19 pandemic. iMcom has tried to recruit local people, but their response to work in this field has yet to be well received, even though they offer reasonable wages and other benefits. The operator of Nasi Kandar Restaurant began to worry that they may need help to achieve the level of quality needed to satisfy customers. This study aims to see whether quality attributes affect consumer satisfaction with Nasi Kandar restaurants by relying on Expectation Confirmation Theory (ECT) as the basis of this research. This paper will uncover some of the three factors related to this area: food, service, and ambience. Three hundred eighty-four questionnaires were distributed, answered, and collected from the Georgetown area in Penang and then analysed using descriptive statistics. This paper uncovers that all three variables that have been tested affect the level of satisfaction of customers who evaluate each Nasi Kandar restaurant they dine. This paper can give an impression to Nasi Kandar restaurant operators that the quality of food, service and ambience are essential in their operations to satisfy customer expectations. This paper suggests that Nasi Kandar restaurant operators must be more creative and innovative in their operations to be more competitive with other

**Keywords:** Nasi Kandar, Quality of Service, Food Quality, Ambience, Customer Satisfaction, Expectation Confirmation Theory.

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

## Introduction

Although served in Malaysia, Nasi Kandar originated in India. Some suggest that the term "Nasi Kandar" means "rice on the shoulder" (Rais et al., 2013). Nasi Kandar is a typical Malaysian dish that originated in Penang. Penang Port workers have eaten Nasi Kandar for lunch since the late 1800s. The coolies started this tradition. At the time, the region north of the Malacca Strait featured a booming international port called Penang. Instead of strolling (also known as "kandar" on shoulders), owners of Nasi Kandar eateries now set up tiny kiosks in the shade of trees or utilise large umbrellas. Nasi Kandar's ownership was passed down from generation to generation. This allowed them to establish their brand identity while expanding the business to encompass several sites of their renowned and well-established restaurant (Ahmad & Johari, 2022). The Pelita Restaurant, for example. It began doing business in Penang and has since extended to other states like Kuala Lumpur, Kedah, Selangor, and Negeri Sembilan. This suggests that Nasi Kandar is gaining more popularity and admiration throughout Malaysia.

Nasi Kandar restaurants have grown a long way since then. Today, Nasi Kandar, one of the most popular dishes out of Penang, can be found all around Malaysia due to its popularity. According to Rais et al (2013), Nasi Kandar is a multi-ethnic dish because Malaysians of all ages, genders, professions, nationalities, and faiths enjoy it. Its opulence distinguishes Nasi Kandar from other varieties of Malaysian local meals of equivalent quality. Even though the vast majority of people are aware of the facts, it remains a popular vacation destination. The Nasi Kandar restaurant has long been a popular gathering place for friends, family, and coworkers. The environment is relaxed, and the menu has many options.

The COVID-19 outbreak has affected restaurants serving Nasi Kandar like other hospitality businesses. Many Nasi Kandar businesses have incurred financial losses due to the COVID-19 epidemic since they cannot hire foreign workers, and those workers cannot return to Malaysia to find work. Due to a significant staff shortage in Penang, around 200 Nasi Kandar operators are stressed because they need help managing guest flow. This is especially problematic now that interstate travel restrictions have been relaxed. Before the pandemic, around 40,000 people worked in the Nasi Kandar business, including locals and visitors from other nations (Dermawan, 2021). Unfortunately, as reported in The New Strait Times (NST) during the COVID-19 outbreak, the number had been reduced to 20,000. According to Mohamed Rizwan Abdul Ghafoor Khan, President of the Indian Muslim Community Organisation of Malaysia (iMcom), and over 200 Nasi Kandar restaurants in Penang are closing due to a labour shortage. In the same article, the President of iMcom said that a Nasi Kandar restaurant in Penang needed 20,000 foreign workers to get the business off the ground. Some restaurant owners have run out of business entirely, while others have shuttered their doors due to a lack of skilled employees to staff their operations. Because of their inability to guarantee compliance with government standard operating procedures (SOP), Nasi Kandar restaurant proprietors are concerned about needing more available workers.

The introduction of updated standard operating procedures (SOPs) and a need for more available labour will decrease restaurant quality. Restaurants may need help to achieve the quality required to meet customers' expectations. Nasi Kandar owners are still looking for local workers despite offering comparable salaries and benefits; as a result, they must rely on labour from other nations. The fact that the majority of them will be unable to return to the country to work as a result of the COVID-19 pandemic Dermawan (2021) will have a significant

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

impact on customer satisfaction at the restaurant, and customers may receive a different set of quality characteristics during the pandemic than they did previously. Based on the well-established Expectation Confirmation Theory (ECT), this study evaluates the influence of quality indicators on customer satisfaction in Nasi Kandar dining places as a direct response to the mentioned situation.

The hospitality and tourism industries are vital in Malaysia, contributing significantly to the country's economy. Nasi Kandar restaurants are a popular food destination in Penang, attracting both locals and tourists. However, the shortage of employees in this field has become a significant challenge for these establishments, leading to a decline in the quality of service provided. To address this issue, this study examines the impact of quality factors on customer satisfaction in Nasi Kandar restaurants. The findings of this study will provide valuable insights into customers' expectations and satisfaction towards these establishments. Additionally, this research will broaden the understanding and skills of academicians in the hospitality and tourism fields, particularly in food quality, service quality, ambience quality, and customer satisfaction.

This study aims to contribute to the literature on the hospitality and tourism industry, particularly in the context of Nasi Kandar restaurants. The findings of this study will provide helpful information for restaurant owners and managers to improve the quality of service provided and attract more employees to this field.

## **Literature Review**

The literature review section provides an overview of the existing research on the impact of food quality, service quality, and ambiance quality on customer satisfaction in the restaurant industry. The section highlights the importance of these factors in shaping customer expectations and the role they play in creating a positive dining experience. Additionally, the section discusses the challenges faced by the restaurant industry due to the COVID-19 pandemic and the impact of these challenges on the labour market. The literature review serves as a foundation for the study on the shortage of employees at Nasi Kandar restaurants in Penang and provides a context for the research questions and hypotheses.

# **Expectation Confirmation Theory**

Oliver (1980) developed the Expectation Confirmation Theory, which investigated consumer happiness's causes and effects. According to Oliver, the Expectation Confirmation Theory (ECT) is a consumer behaviour model that characterises and predicts satisfaction (Oliver, 1980). Validating expectations, validating utility, enjoyment, and ongoing purpose are the four primary components of ECT. The degree to which a user's initial ideas are verified by actual use is confirmation. As a result, Bhattacharjee (2001); Thanasarnaksorn (2018) highlight how expectations build with increased involvement and how post-adoption expectations rise due to real-world experiences. Post-customer behaviour after the experience is commonly employed in any service industry, including consumer retention goals. Aside from that, prior consumer expectations and post-experience assessments provide context for this issue. As a result, this study leverages ECT to assess company agility from a consumer's perspective.

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

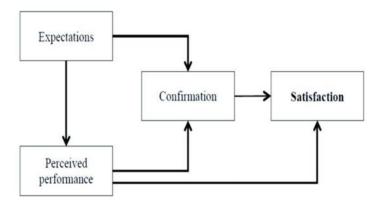


Figure 1. Expectation Confirmation Theory (Oliver, 1980)

Figure 1 depicts the association between factors in ECT. ECT is frequently employed in consumer behaviour and service marketing literature to investigate customer satisfaction and post-purchase behaviour (Oliver, 1980; Lee & Kim, 2020; Juliana et al., 2021; Oh et al., 2022). According to Oliver's expectation confirmation theory, users' continuous intention is driven by their usage experience and cognitive assumptions, which are influenced by expectation confirmation. Furthermore, Oliver (1980) revealed that expectation confirmation directly influences future intentions.

Because ECT has been used to study the restaurant industry many times (Lee & Kim, 2020; Juliana et al., 2021; Oh et al., 2022), this paper wants to compare customers' quality expectations for Nasi Kandar restaurants that may be affected by the businesses' services after the Covid-19 outbreak. Customers can determine how their expectations are met through onthe-spot observation before purchasing from a restaurant. Customer satisfaction decision-making is analogous to expectation confirmation theory. As a result, this study proposes that confirmation of expectations for food quality, service quality, and ambience quality influences customer satisfaction in Nasi Kandar restaurants. This is demonstrated in Figure 2.

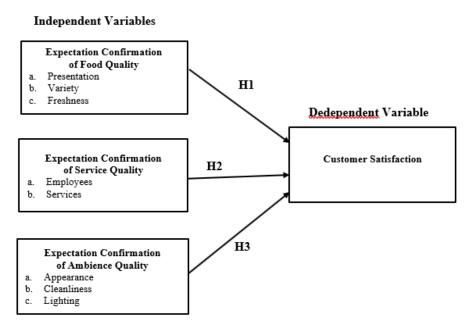


Figure 2. Study Framework

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

# **Customer Satisfaction**

Kasim (2021) defines customer satisfaction as a consumer's perception of a product or service that meets their expectations. Consumers will be disappointed if their expectations are not met or exceeded; on the other hand, they will be happy if they are met or exceeded. Customer satisfaction is, therefore, a critical factor in shop success. Customer satisfaction should be a priority for any company seeking repeat business in the highly competitive restaurant industry. Customer satisfaction is defined as a post-purchase attitude that can be positive or negative depending on the customer's personal experience (Hidayat et al., 2020). Customer satisfaction is also defined as realising the customer's reaction (Thusyanthy & Tharanikaran, 2017).

According to ECT, disconfirmation and expectations impact satisfaction, with disconfirmation showing the gap between expectations and perceived performance. Customer satisfaction is critical to retaining existing customers and gaining new ones. Customers whose requirements are not met during consumption are less satisfied. Their (un)satisfaction is expected to substantially impact future decisions about where, what, and how they will buy, i.e., use the service (Khadka & Maharjan, 2017). According to previous ECT literature, customers can be satisfied or disappointed depending on how successfully their original expectations are met (Bhattacherjee, 2001; Venkatesh et al., 2011). In other words, firm performance or responsiveness determines client happiness. Furthermore, Bhattacherjee (2001) argues that confirmation improves pleasure.

# **Food Quality**

Customer satisfaction and company profitability are inextricably linked to product and service quality. Increased food quality equals increased customer satisfaction in the restaurant industry (Kotler & Keller, 2016). Food quality, as defined by Bihamta et al. (2017), is a level of perfection that contributes to the value of products and their acceptability for eating. It means that food that meets the standard is safe to eat because it already meets the precise requirements of the authorities (Brei et al., 2017). Remember that requirements in the food service industry are crucial to fulfilling consumers' demands and wishes (Bihamta et al., 2017).

Food quality is also critical to customers' eating experiences, influencing customer satisfaction and future behaviour (Kivela et al., 2000; Sulek & Hensley, 2004; Namkung & Jang, 2007). Even though personnel shortages exist, the most essential aspect of the restaurant industry that must be addressed is food quality (A. Al-Tit, 2015). Liu and Jang (2009) consider food quality a vital part of restaurant success. Previous research finds that food quality directly impacts consumer happiness (Namkung & Jang, 2007). According to Susskind (2000), food quality was also a significant determinant of consumer ratings of a restaurant. Food quality was perceived as a crucial criterion for customers to meet their various expectations and needs. Furthermore, meal quality was a significant determinant of consumer satisfaction and behavioural intention.

According to (Liu & Jang, 2009; Ha & Jang, 2010), meal presentation, diversity, and freshness are essential food-related qualities. As a result, the current study considers food presentation, diversity, and freshness to be essential food-related characteristics of Nasi Kandar restaurant. Regarding satisfaction, visiting customers can assess food's presentation, variety, and freshness through on-the-spot observations, which can help them determine how well their

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

food quality expectations are met. As a result, meal presentation, variety, and freshness will significantly impact customer satisfaction expectations in Nasi Kandar restaurants regarding food quality. For those reasons, we suggest the following hypothesis:

Hypothesis 1: Food quality positively affects expectation confirmation of customers' satisfaction.

Hypothesis 1a: Food presentation positively affects the expectation confirmation of customers' satisfaction.

Hypothesis n 1b: Food variety positively affects the expectation confirmation of customers' satisfaction.

Hypothesis 1c: Food freshness positively affects the expectation confirmation of customers' satisfaction.

# **Service Quality**

Since the initial study by Parasuraman, Zeithaml, and Berry (1985), service quality has been demonstrated to provide a more precise understanding of measuring employee performance in a variety of industries, including the restaurant industry (Stevens et al., 1995; Omar et al., 2016; Keshavarz et al., 2016; Karani et al., 2019; Tuncer et al., 2020). Internally, service quality is usually conditioned by comparing expected and perceived service. Companies that provide adequate service to their consumers or customers are likelier to remain in business (Liu & Wu, 2007). Restaurant service employees must be adept at problem-solving, giving swift and efficient services, and delivering excellent services, according to (Omar et al., 2016). Staff are critical service- related aspects of Nasi Kandar restaurants; clients can evaluate staff attitudes and services based on on-the-spot observations. The level of service delivered can help clients determine how well their service quality expectations are met. Finally, we expect personnel and service to significantly impact customer satisfaction and service quality expectations in Nasi Kandar restaurants. To understand the aspect of service quality more clearly in this study, these are the hypotheses:

Hypothesis 2: Service quality positively affects expectation confirmation of customers' satisfaction.

Hypothesis 2a: Employees positively affect the expectation confirmation of customers' satisfaction.

Hypothesis 2b: The level of service positively affects the expectation confirmation of customers' satisfaction.

# **Ambience Quality**

Customers perceive the surrounding environment as the atmosphere. The planned space design elicits various emotional responses in buyers and influences their intention to return (Wan Nawawi et al., 2018). Environmental psychology studies show that the environment significantly impacts customer attitudes, emotions, and behavioural intentions (Restuti, 2019). According to Liu and Jang (2009), the cleanliness of the workplace, staff appearance, and illumination are all critical factors of ambience. As a result, this study considers environmental cleanliness, employee appearance, and lighting as essential ambience-related features of Nasi Kandar restaurants. The hypothesis for ambience quality is as follows:

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

Hypothesis 3: Ambiance quality positively affects expectation confirmation of customers' satisfaction.

Hypothesis 3a: Employee appearance positively affects the expectation confirmation of customers' satisfaction.

Hypothesis 3b: Cleanliness positively affects the expectation confirmation of customers' satisfaction.

Hypothesis 3c: Lighting positively affects the expectation confirmation of customers' satisfaction.

# Methodology

The methodology section outlines the research design, population, and sample of the study on the shortage of employees at Nasi Kandar restaurants in Penang. The section provides a detailed description of the quantitative research approach and the structured questionnaires used to collect data on food quality, service quality, ambiance quality, customer satisfaction, and expectation confirmation. Additionally, the section discusses the pilot study conducted to test the internal reliability of the measurement items and the screening questions used to ensure the validity of the data. The methodology section serves as a guide for the study's data collection and analysis and provides transparency on the research process.

# **Research Design**

A quantitative research design with structured questionnaires was used as the research instrument to meet the study objectives. A quantitative approach, according to Creswell and Creswell (2017), is one where the researcher collects data on predetermined instruments to collect statistics that yield large numbers of respondents and post positive claims to develop knowledge.

# **Population and Sample**

The target population is the Penang population. According to the Majlis Bandaraya Seberang Perai, Penang is divided into numerous districts, including Seberang Perai Tengah, Seberang Perai Utara, Seberang Perai Selatan, Daerah Timur Laut, and Daerah Barat Daya. The total population of the State of Penang is 1,350,671 people. The Krejcie and Morgan table (KMT, Krejcie & Morgan, 1970) is well-known among behavioural and social science researchers for determining sample size may be applied to any defined population and does not require any calculations. According to the KMT, a sample size of 384 is enough for a population of 1,000,000 or more. As a result, 384 has been dubbed the "magic" number in research and has been referenced in tens of thousands of articles and theses to date. This strategy was adopted to ensure the results were grounded in real- world experiences.

# **Sampling Design and Data Collection**

The sampling approach for this study is purposive sampling. Purposive sampling is a straightforward sampling method since it must reject those not qualified to participate in the survey (Bhardwaj, 2019). Even though the exact number of populations is known, not all respondents will be qualified. This means that only customers who have eaten at Nasi Kandar restaurants in Penang were eligible to participate. As a result, those who have never eaten at a Nasi Kandar restaurant in Penang will be ineligible to participate in this study.

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

# **Survey Instrument Development**

All questions were measured using a Likert-type scale, ranging from 1 "strongly disagree" to 5 "strongly agree". Section A consists of questions related to the demographic profiles of the participants. Starting from Section B until Section L consists of measuring food quality, service quality and ambience quality. Lastly, as for Section M, there will be questions to measure customer satisfaction. Screening questions have been asked at the beginning of the Google Form to ensure whether the respondents have been to or eaten at nasi kandar restaurants. This method ensures that the data is eligible and that all the data is valid.

# **Pilot Study**

A pilot study was performed, and the data were then analysed by referring to Cronbach's alpha values. Cronbach's alpha was used to examine the internal reliability of the 29 items measuring the three constructs. Cronbach's alpha varies from 0 to 1, and a value of 0.6 or less indicates unsatisfactory internal consistency reliability. The ambience quality score with seven items had the highest alpha coefficient of 0.966. Food quality and service quality have alpha coefficients of 0.915 and 0.922. Finally, the customer satisfaction items were computed and analysed. The alpha coefficient reported for this variable is 0.963. Table 1 exhibits the reliability scores of all constructs above 0.6.

Table 1
Reliability Test

Constructs	Cronbach's Alpha	No. of Items	
Food Quality	0.915	10	
Service Quality	0.922	9	
Ambience Quality	0.966	7	
Customer Satisfaction	0.963	3	

# **Findings**

The following section presents the study's key findings on the shortage of employees at Nasi Kandar restaurants in Penang. Through a quantitative research design with structured questionnaires, the study aimed to assess the impact of food quality, service quality, and ambience quality on customer satisfaction and expectation confirmation. The findings shed light on the crucial characteristics of Nasi Kandar restaurants that influence customer satisfaction and the challenges these establishments face due to the COVID-19 pandemic.

# **Demographic Profiles**

As shown in Table 2, most respondents were female (53.00%). More than half of the respondents (66.8%) were between 18 and 30 years old. The analysis found that most respondents are single (68.6%).

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

Table 2
Respondents' Demographic Profiles

Socio-demo	graphic Profiles	Total n	Percentage (%)
Gender:			
	Male	183	47
	Female	206	53
Age Grou	ıp:		
	18 to 30 years old	260	66.8
	31 to 40 years old	66	17
	41 to 50 years old	38	9.8
	51 years old and above	25	6.4
Marital St	atus:		
	Single	267	68.6
	Married	121	31.1
	Others	1	0.3

# **Reliability Test**

Four Cronbach's alpha values in this questionnaire were more than 0.7, suggesting that the internal reliability for each questionnaire's first-level indicator was high. Table 3 shows the result of the reliability test. Food quality has the highest score (mean 40.2982, SD= 7.37812), showing that food quality positively affects expectation confirmation of customers' satisfaction since most respondents agree with the item. The second involvement variable indicates that (mean= 34.4242, SD= 6.98065). The ambience quality score was (mean= 26.7815, SD= 5.65513). Finally, the dependent variable indicates customer satisfaction with a score (mean= 11.7044, SD 2.60303)).

Table 3
Reliability scores, Mean scores, and Standard Deviations

Items	No. of item	Mean	SD	Cronbach's alpha
Food Quality	10	40.2982	7.37812	0.927
Service Quality	9	34.4242	6.98065	0.926
Ambience Quality	7	26.7815	5.65513	0.921
Customer Satisfaction	3	11.7044	2.60303	0.904

Note: n=389

## **KMO and Bartlett's Test**

In this study, sampling adequacy was evaluated using the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity tests. According to Table 4, Bartlett's Test of Sphericity (0.000) and the KMO Test of Sampling Adequacy (0.835) indicate that the data were appropriate for factor analysis. Each variable's KMO test results for greater than 0.5 are all present. It can be demonstrated that the KMO and Bartlett test outcomes for every variable examined in the questionnaire met the criteria, indicating that the validity test was successful.

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

Table 4

KMO and Bartlett's Test

KMO and Bartlett's Test							
Kaiser-Meyer-Olkin Measure of Sampling Adequacy835							
Bartlett's Test of Sphericity	Approx. Chi-Square	1256.192					
	6						
	Sig.	.000					

# **Pearson's Correlation**

Table 5 shows the relationship between Food Quality, Service Quality, Ambience Quality and involvement in Customer Satisfaction. Based on the correlation, the highest relationship in Pearson's Correlation is between Ambience Quality and Customer Satisfaction with 0.798. Next, a positive relationship between Service Quality and Customer Satisfaction is 0.744. Also, there is a strong positive relationship between Food Quality and Customer Satisfaction (0.701).

Table 5
Pearson's Correlation

	Customer satisfaction
Pearson Correlation	.701
Sig. (2-tailed)	.000
Pearson Correlation	.744
Sig. (2-tailed)	.000
Pearson Correlation	.798
Sig. (2-tailed)	.000
	Sig. (2-tailed)  Pearson Correlation Sig. (2-tailed)  Pearson Correlation

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

## **Pearson Correlation Matrix**

A Pearson Correlation Matrix was constructed to analyse the variables most significantly correlated with customer satisfaction (Table 6). Gender was negatively correlated with expectation confirmation of food quality (r=-0.07), expectation confirmation of service quality (r=-0.03) and expectation confirmation of ambience quality (r=-0.01). There is a negative correlation between age and expectation confirmation of food quality (-0.05), and age was not significantly correlated with the other three factors (p value>0.05). The matrix also revealed that there was a significantly positive correlation between expectation confirmation of food quality and customer satisfaction (r=0.74) and expectation confirmation of ambience quality and customer satisfaction (r=0.74) and expectation confirmation of ambience quality and customer satisfaction (r=0.80).

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

Table 6

Pearson Correlation Matrix

		GE	AG	MA	ECFQ	ECSQ	ECAQ	CS
GE	Gender							
AG	Age	.16**						
MA	Marital	.14**	.68**					
ECFQ	Food_Quality	-0.07	-0.05	-0.02				
<b>ECSQ</b>	Service_Quality	-0.03	0.01	-0.01	.77**			
<b>ECAQ</b>	Ambience_Quality	-0.01	0.07	0.01	.72**	.83**		
CS	Customer_Satisfaction	0	0.01	-0.04	.70**	.74**	.80**	1

# **Multi Linear Regression Analysis**

Based on Table 7 shows that r2=0.675. It means that the dependent variable (customer satisfaction) is variance explained by the independent variables (food quality, service quality, ambience quality).

Table 7

Model Summary

Model Summary <sup>b</sup>											
Model R R Adjusted				ed Std. Error	Change Statistics						
		Square	R Square	of the	R	F	df1	df2	Sig.	F	
				Estimate	Square Change			Chang	ge		
					Change						
1	.821ª	.675	.672	.49672	.675	266.302	3	385	.000		
a. Predictors: (Constant), Ambience_Quality, Food_Quality, Service_Quality b. Dependent Variable: Customer_Satisfaction											

Table 8 shows the ANOVA test to determine whether the regression model that has been tested is significant towards the research. The table shows that the p-value is 0.05. this indicated that the p-value is 0.05. This indicates that the null hypothesis was rejected. This demonstrated that the regression model is relevant to the research study.

Table 8

ANOVA Model

ANOVA <sup>a</sup>										
Model		Sum of Squares	df	Mean Square	F	Sig.				
1	Regression	197.118	3	65.706	266.302	.000b				
	Residual	94.993	385	.247						
	Total	292.111	388							

a. Dependent Variable: Customer\_Satisfaction

b. Predictors: (Constant), Ambience\_Quality, Food\_Quality, Service\_Quality

Table 9 shows the coefficient result: the standardised coefficient for Food Quality is 0.211, Service Quality is 0.141, and Ambience Quality is 0.528. Then, the significance for food quality

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

is 0.000, and service quality is 0.016; meanwhile, for ambience quality, the significance is 0.000. In the multiple regression analysis, we controlled for the expectation confirmation of food quality, service quality and ambience quality effect towards customer satisfaction. We assumed that customer satisfaction would depend on customer expectation confirmation on food quality, service quality and ambience quality. The analysis revealed that all tested variables significantly influenced customer satisfaction (See Table 9). A comparison of the regression coefficients of each variable further confirmed that food quality, service quality and ambience quality highly affected customer satisfaction at nasi kandar restaurant.

Table 9
Coefficient Result

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	/
		В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.125	.144		.872	.384		
	Food_Quality	.248	.055	.211	4.508	.000	.386	2.592
	Service_Quality	.158	.065	.141	2.418	.016	.247	4.053
	Ambience_Quality	.568	.058	.528	9.820	.000	.292	3.428
a. I	a. Dependent Variable: Customer_Satisfaction							

## Discussion

This study aims to examine the influence of quality factors on consumer satisfaction towards Nasi Kandar restaurants. This study investigates the relationship between food quality, service quality and ambience quality towards customer satisfaction. The findings of this study show that all hypotheses, namely H1, H2 and H3, were supported. The R-square finding is 0.675, which shows that 67.5% of the variance in consumer satisfaction towards nasi kandar restaurants can be explained by food quality, service quality and ambience quality.

According to the H1 finding, food quality positively affects the expectation confirmation of customers' satisfaction. As a result, hypothesis 1 is supported. The finding of this study is consistent with the previous studies, and food quality has a direct positive impact on consumer satisfaction (Namkung & Jang, 2007). Food quality was also one of the main predictors of consumers' ratings of a restaurant, according to (Susskind, 2000). This study shows that consumers believe that the food's quality positively impacts how satisfied they are with nasi kandar restaurants. As a result, the current study uses the food presentation, variety, and freshness of Nasi Kandar restaurant as key food quality attributes.

According to the H2 finding, service quality positively and significantly affects expectation confirmation of customer satisfaction. As a result, hypothesis 2 is supported. The finding of this study is consistent with past studies, according to Liu and Jang's (2009) argument regarding customer service, helpful and friendly staff members and prompt service are crucial qualities. As a result, the current study uses employee and service as crucial service-related characteristics of nasi kandar restaurants. We, therefore, anticipate that the confirmation of

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

visiting customers' expectations of the quality level of service in Nasi Kandar restaurants will be significantly impacted by employees and service.

Finally, the finding of H3 shows that ambience quality positively affects expectation confirmation of customer satisfaction. As a result, hypothesis 2 is supported. This is related to the previous study as, according to Yu et al (2018), vital elements of ambience include lighting, employee appearance, and how clean the workplace is. As a result, this study views environmental cleanliness, employee presentation, and lighting as crucial ambience- related characteristics of Nasi Kandar restaurants.

# **Study Limitations**

The study has several limitations that should be considered. Firstly, the study was conducted in Penang, Malaysia, and the findings may need to be generalisable to other regions or countries. Secondly, the study only focused on three quality factors: food quality, service quality, and ambience quality. Other factors, such as price, location, and menu variety, should have been considered. Finally, the study only focused on frequent customers of Nasi Kandar restaurants, and the findings may not apply to occasional customers or first-time visitors.

Future studies could address these limitations by researching regions or countries to determine if the findings are consistent across different contexts. Additionally, future studies could consider other quality factors such as price, location, and menu variety to provide a more comprehensive understanding of customer satisfaction in Nasi Kandar restaurants. Finally, future studies could expand the sample size to include occasional customers or first-time visitors to determine if the findings are consistent across different customer segments.

# Conclusion

The COVID-19 pandemic has had a severe influence on the food business in Malaysia. One of the tourist attractions in Penang, the Nasi Kandar Restaurant, is no exception to the ravages of the pandemic. As revealed at the beginning of this article, Nasi Kandar restaurant owners in Penang face a very acute lack of labour due to the COVID-19 pandemic. Therefore, this study assessed the frequent customers in Nasi Kandar restaurants and whether they are still pleased with the qualities of these restaurants.

Specifically, this research focuses on the primary expectation qualities for a restaurant, namely food quality, service quality and ambience quality. In food quality, we had the opportunity to explore in deeper detail regarding presentation, variety, and freshness. From our observation, freshness and presentation only get a significant response to customer satisfaction. However, the variety of food has a more significant impact due to the need for a workforce to prepare many types of food. Nasi Kandar restaurant operators can diversify the food by introducing a new menu which may be easier to prepare with limited labour.

As for service quality, staff performance and the degree of service delivered to the customers significantly impact satisfaction. In daily operations with the lack of employees, the quality of service could be more satisfactory in terms of efficiency, time and attentiveness than the existing employees. Customers also complain that they must wait a long time to get food and receive less attention at the dining table. If the problem of lack of workers has yet to recover

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

fully, Nasi Kandar restaurant operators need to modify the way of service to be more efficient and faster.

Finally, we determine precisely on ambience quality, which pertains to staff appearance, cleanliness, and lighting. Although the workers' appearance and the restaurant's lighting were significant, the effect faced by the nasi kandar restaurants at this time could have been more critical. The main problem in terms of ambience is more about the cleanliness of the restaurant. Many tables needed to be cleaned even though the customers had left for a long time. Crockery and eating utensils were also insufficient due to a lack of workers and time to wash. Nasi kandar restaurant operators are suggested to use equipment that is more appropriate to the lack of workers, among which they may use disposable equipment or high-tech equipment for smoother operations.

The impact of this paper towards the academic field and industry is significant. From an academic perspective, this study provides new insights into the relationship between quality factors and customer satisfaction in the context of Nasi Kandar restaurants. The findings of this study will broaden the understanding and skills of academicians in the hospitality and tourism fields, particularly in food quality, service quality, ambience quality, and customer satisfaction. This research will also provide a foundation for future studies in this area, allowing for further exploration of the topic.

From an industry perspective, this study provides valuable information for restaurant owners and managers to improve the quality of service provided and attract more employees to this field. The findings of this study will help Nasi Kandar restaurant operators understand the expectations and satisfaction of their customers, allowing them to tailor their services to meet their needs. Additionally, this research will provide insights into the impact of the shortage of employees on the quality of service provided, allowing restaurant owners and managers to develop strategies to address this issue.

# References

- Al-Tit, A. (2015). The effect of service and food quality on customer satisfaction and hence customer retention. Asian Social Science, 11(23). https://doi.org/10.5539/ass.v11n23p129
- Ahmad, A., & Johari, S. (2022). Georgetown as a Gastronomy Tourism Destination (pp. 71–83). https://doi.org/10.4018/978-1-6684-3889-3.ch005
- Bhattacherjee, A. (2001). Understanding Information Systems Continuance: An expectation-confirmation model. MIS Quarterly, 25(3), 351. https://doi.org/10.2307/3250921
- Bihamta, H., Jayashree, S., Rezaei, S., Okumus, F., & Rahimi, R. (2017). Dual pillars of hotel restaurant food quality satisfaction and brand loyalty. British Food Journal, 119(12), 2597–2609. https://doi.org/10.1108/bfj-07-2016-0344
- Brečić, R., Mesić, Ž., & Cerjak, M. (2017). Importance of intrinsic and extrinsic quality food characteristics by different consumer segments. British Food Journal, 119(4), 845–862. https://doi.org/10.1108/bfj-06-2016-0284
- Dermawan, A. (2021, October 22). 200 nasi kandar restaurants stressed out over shortage of workers [NSTTV]. New Straits Times. Retrieved November 17, 2021, from https://api.nst.com.my/news/nation/2021/10/738846/200-nasi-kandar-restaurants-stressed-out-over-shortage-workers-nsttv

- Garg, A., & Kumar, J. (2017). Exploring customer satisfaction with University Cafeteria Food Services. an empirical study of temptation restaurant at Taylor's University, Malaysia. European Journal of Tourism, Hospitality and Recreation, 8(2), 96–106. https://doi.org/10.1515/ejthr-2017-0009
- Ha, J., & Jang, S. C. (S. (2010). Effects of service quality and food quality: The moderating role of atmospherics in an ethnic restaurant segment. International Journal of Hospitality Management, 29(3), 520–529. https://doi.org/10.1016/j.ijhm.2009.12.005
- Hidayat, D., Bismo, A., & Basri, A. R. (2020). The effect of food quality and service quality towards customer satisfaction and repurchase intention (case study of Hot Plate restaurants). Manajemen Bisnis, 10(1), 1. https://doi.org/10.22219/jmb.v10i1.11913
- Juliana, J., Beanardo, M. F., Hering, J. N., Jennifer, I., & Ricky, R. (2021). Integration expectation confirmation theory and AISAS model in coffee shop repurchase intention. JURNAL MANAJEMEN BISNIS, 8(2), 255–267. https://doi.org/10.33096/jmb.v8i2.788
- Karani, L. M., Syah, T. Y. R., & Anindita, R. (2019). Influence of service quality and customer satisfaction on customer loyalty in restaurants of the Tangerang Area. Russian Journal of Agricultural and Socio-Economic Sciences, 92(8), 142–147. https://doi.org/10.18551/rjoas.2019-08.15
- Kasim, L. (2021). Analysis of Service Quality Toward Customer Satisfaction in the Legend Coffee Yogyakarta. Iqtishodiyah: Jurnal Ekonomi dan Bisnis Islam, 7(2), 153-168.
- Khadka, K., & Maharjan, S. (2017). Customer Satisfaction and Customer Loyalty: Case Trivsel Städtjänster (Trivsel siivouspalvelut) (dissertation). Centria-ammattikorkeakoulu.
- Keshavarz, Y., Jamshidi, D., & Bakhtazma, F. (2016). The influence of service quality on restaurants' customer loyalty. Oman Chapter of Arabian Journal of Business and Management Review, 6(4), 1–16. https://doi.org/10.12816/0033275
- Kivela, J., Inbakaran, R., & Reece, J. (2000). Consumer research in the restaurant environment. part 3: Analysis, findings and conclusions. International Journal of Contemporary Hospitality Management, 12(1), 13–30. https://doi.org/10.1108/09596110010304984
- Kotler, P., & Keller, K. L. (2016). Marketing management: 15th edition. Pearson Education.
- Lee, J., & Kim, Y.-K. (2020). Online reviews of restaurants: Expectation-confirmation theory. Journal of Quality Assurance in Hospitality & Tourism, 21(5), 582–599. https://doi.org/10.1080/1528008x.2020.1712308
- Liu, T.-C., & Wu, L.-W. (2007). Customer retention and cross-buying in the banking industry: An integration of service attributes, Satisfaction and Trust. Journal of Financial Services Marketing, 12(2), 132–145. https://doi.org/10.1057/palgrave.fsm.4760067
- Liu, Y., & Jang, S. C. (S. (2009). Perceptions of Chinese restaurants in the U.S.: What affects customer satisfaction and behavioral intentions? International Journal of Hospitality Management, 28(3), 338–348. https://doi.org/10.1016/j.ijhm.2008.10.008
- Namkung, Y., & Jang, S. C. (2007). Does food quality really matter in restaurants? its impact on customer satisfaction and behavioral intentions. Journal of Hospitality & Tourism Research, 31(3), 387–409. https://doi.org/10.1177/1096348007299924
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of Satisfaction Decisions. Journal of Marketing Research, 17(4), 460. https://doi.org/10.2307/3150499
- Oh, S., Ji, H., Kim, J., Park, E., & del Pobil, A. P. (2022). Deep learning model based on expectation-confirmation theory to predict customer satisfaction in Hospitality Service. Information Technology & Tourism, 24(1), 109–126. https://doi.org/10.1007/s40558-022-00222-z

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

- Omar, M. S., Ariffin, H. F., & Ahmad, R. (2016). Service quality, customers' satisfaction and the moderating effects of gender: A study of Arabic restaurants. Procedia Social and Behavioral Sciences, 224, 384–392. https://doi.org/10.1016/j.sbspro.2016.05.393
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. Journal of Marketing, 49(4), 41. https://doi.org/10.2307/1251430
- Parsa, H. G., Dutta, K., & D. (2017). Consumer behaviour in restaurants: Assessing the importance of restaurant attributes in consumer patronage and willingness to pay. Hospitality Marketing and Consumer Behavior, 211–239. https://doi.org/10.1201/9781315366227-9
- Rais, A. A., Manan, W. W. A., Shariza, A. R., & Nadiah, W. W. (2013). A comparative study of nasi kandar eating patterns among patrons in the Klang Valley and Penang of Malaysia. International Food Research Journal, 20(4).
- Restuti, S. (2019). The effect of quality of physical environment, food and service on customer satisfaction and behavioral intentions in Pekanbaru. European Journal of Business and Management. https://doi.org/10.7176/ejbm/11-29-02
- Sulek, J. M., & Hensley, R. L. (2004). The relative importance of food, atmosphere, and fairness of wait. Cornell Hotel and Restaurant Administration Quarterly, 45(3), 235–247. https://doi.org/10.1177/0010880404265345
- Stevens, P., Knutson, B., & Patton, M. (1995). Dineserv: A tool for measuring service quality in restaurants. Cornell Hotel and Restaurant Administration Quarterly, 36(2), 56–60. https://doi.org/10.1177/001088049503600226
- Stranjancevic, A., & Bulatovic, I. (2015). Customer satisfaction as an indicator of service quality in tourism and hospitality. International Journal for Quality Research, 9(4), 689. https://www.ijqr.net/journal/v9-n4/9.pdf
- Susskind, A. (2000). How restaurant features affect check averages: A study of the Toronto restaurant market. The Cornell Hotel and Restaurant Administration Quarterly, 41(6), 56–63. https://doi.org/10.1016/s0010-8804(00)80023-3
- Thanasarnaksorn, C. (2018). The influence of social media and perceived logistics service quality: the application of expectation confirmation theory (thesis). National Institute of Development Administration.
- Thusyanthy, V., & Tharanikaran, V. (2017). Antecedents and outcomes of customer satisfaction: A comprehensive review. International Journal of Business and Management, 12(4), 144. https://doi.org/10.5539/ijbm.v12n4p144
- Tuncer, I., Unusan, C., & Cobanoglu, C. (2020). Service quality, perceived value and customer satisfaction on behavioral intention in restaurants: An integrated structural model. Journal of Quality Assurance in Hospitality & Tourism, 22(4), 447–475. https://doi.org/10.1080/1528008x.2020.1802390
- Venkatesh, V., Thong, J. Y., Chan, F. K., Hu, P. J., & Brown, S. A. (2011). Extending the two-stage information systems continuance model: Incorporating UTAUT predictors and the role of context. Information Systems Journal, 21(6), 527-555. https://doi.org/10.1111/j.1365-2575.2011.00373.x
- Yu, Y., Luo, M., & Zhu, D. (2018). The effect of quality attributes on visiting consumers' patronage intentions of green restaurants. Sustainability, 10(4), 1187. https://doi.org/10.3390/su10041187
- Wan Nawawi, W. N., Wan Kamarudin, W. N., Mat Ghani, A., & Adnan, A. M. (2018). Theme restaurant: Influence of atmospheric factors towards the customers' revisit intention.

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

Environment-Behaviour Proceedings Journal, 3(7),35. https://doi.org/10.21834/e-bpj.v3i7.1231