

VOLUME 6 No. 1
JUNE 2009

ISSN 1675-7017

SOCIAL AND MANAGEMENT RESEARCH JOURNAL



RESEARCH MANAGEMENT INSTITUTE



SOCIAL AND MANAGEMENT RESEARCH JOURNAL

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Social and Management Research Journal is jointly published by Research Management Institute (RMI) and University Publication Centre (UPENA), Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia.

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Customers' Perception of Restaurant Service Quality: Evidence from Malaysia

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ABSTRACT

Restaurant plays a key role in attracting tourists and hence contributes significantly to a country's economy. Restaurant service quality should therefore be well managed and sustained to ensure continuous and increased patronage. In this respect, the determinants and consequences of restaurant service quality need to be well understood. This paper presents the customers' perception of restaurant service quality for a sample of 342 restaurant customers in Malaysia. The results showed that customers were generally satisfied with the service quality, price and variety of food. Reliability received the highest ratings followed by tangibles and responsiveness. Restaurants serving Western cuisine were rated better than the restaurants serving local food. Customer-perceived restaurant service quality was significantly correlated with the customer satisfaction and loyalty. Age and ethnic background did not affect perception of foodservice quality whereas gender influenced perceptions of food variety and overall satisfaction.

Keywords: *Restaurant service quality, customer satisfaction, loyalty, Malaysia*

Introduction

The foodservice industry plays an important role in a nation's economy. Food services can be one of the determinants of a country's

competitiveness as a tourist destination (Dwyer *et al.*, 1998). Currently, foodservice operators face a variety of challenges such as distribution and regulatory problems, increasing food prices, higher operating costs and shrinking profits (Bourke & Bates, 2002). Consumers are also becoming more demanding, impatient and sophisticated (Stevens *et al.*, 1995). In this regard, foodservice quality plays a critical role in achieving competitive advantage, customer satisfaction and loyalty. Managers need to understand how customers perceive the quality of products and services and how these perceptions influence purchase decisions (Heung *et al.*, 2000).

This study focuses on the restaurant segment of the foodservice industry in Malaysia. It is very competitive due to the quantity and types of restaurants available. The choices range from fine dining to casual and quick-service dining establishments. However, there is a lack of published research on the perceptions of Malaysian consumers towards the quality of foodservice in restaurants. The first objective of this study is therefore, to determine the perceptions of restaurant service quality among Malaysian consumers and how this affects their levels of satisfaction and loyalty. Furthermore, it compares restaurants serving different types of ethnic cuisine, which is an area often neglected in other studies. The second objective is to identify whether demographic factors such as age, gender, ethnic origin, occupation and education level influence perceptions of restaurant service quality. These findings have meaningful implications for both academics and managers.

Service Quality in the Restaurant Industry

There are numerous studies investigating service quality in the foodservice industry that applied the gap model (Parasuraman *et al.*, 1985) which measures quality based on the differences or gaps between customer's expectations and their perceptions of the service performance. The SERVQUAL questionnaire is used to measure both expectations and performance using 22 questions covering five service dimensions, namely, reliability, responsiveness, tangibles, assurance and empathy (Parasuraman *et al.*, 1988). Reliability refers to accurate, dependable and consistent performance of the service. Responsiveness means being prompt and willing to serve the customer. The physical service aspects such as appearance of employees, equipment and facilities are classified as tangibles. The dimension of assurance comprises the competence, courtesy and credibility of staff which generate customer trust and

confidence. Lastly, empathy involves caring and personalized attention, understanding customer needs and convenient access to the service.

The SERVQUAL instrument has been widely applied in studies covering a variety of service industries such as healthcare (Mangold & Babakus, 1991; Kilbourne *et al.*, 2004), public services (Bryslund & Curry, 2001), higher education (Soutar & McNeil, 1996), telemarketing (Kassim & Bojei, 2002) and banking (Arasli *et al.*, 2005), as well as in other cultures (*e.g.* Johnson & Sirikit, 2002; Kassim & Bojei, 2002; Arasli *et al.*, 2005; Jabnoun & Khalifa, 2005). Nevertheless, it has generated criticisms in terms of its basic methodology and conceptualization (Cronin & Taylor, 1992). Teas (1993) also questioned the validity of the way SERVQUAL conceptualized and measured expectations while Babakus & Boller (1992) identified the use of gap scores and mixed-item wording as two of the major problems. Different industries vary in terms of the service quality dimensions that were relevant (Carman, 1990, Babakus & Boller, 1992), hence the instrument may need to be adapted for use in different industries.

In spite of this, SERVQUAL remains popular whereby many researchers have used it as the starting point in measuring service quality in the foodservice industry while making appropriate adjustments to the original items and wordings as needed. Stevens *et al.* (1995) adapted SERVQUAL to the restaurant industry and produced DINESERV. Based on a survey of casual dining, fine dining and quick-service restaurants, they found that reliability was most important among restaurant consumers, followed by tangibles, assurance, responsiveness and empathy. The SERVQUAL instrument was also applied by John and Tyas (1996) to the catering sector where their findings revealed that competitive differentiation among food caterers was based on prompt service, reliability, staff behaviour (helpful, knowledgeable, polite and provide individualized attention to customers) and attractive appearance of facilities, food and staff.

Heung *et al.* (2000) adapted the DINESERV scale to study desired service levels, adequate service levels and perceived performance in four types of restaurants (Chinese, casual dining, full service and quick service) in an airport in Hong Kong. They found that regardless of the type of restaurants, customers desired convenience in operating hours, cleanliness, politeness, courtesy, well-dressed employees and readable menus. Customers had the highest expectations for full-service restaurants whereby convenient operating hours was considered the top factor for adequate service levels. On the other hand, in a study of consumers'

expectations and perceptions of performance in the fast-food industry, Lee *et al.* (2004) used a ratio-based SERVQUAL scale to overcome limitations of the gap score. They found tangibles to be less important to consumers. In contrast, the factors that need to be emphasized are reliability in solving problems and maintaining accurate records, providing prompt service, keeping customers informed of when the service will be performed, having convenient business hours, giving personal attention, caring about customers' interests and making customers feel comfortable. Winsted (2000) found that the key behaviours of service employees which contributed to customer satisfaction in the restaurant industry, were treating the customer with care, being attentive and pleasant.

Zopiatis and Pribic (2007) studied the expectations of college students in selecting a food and beverage establishment using the DINESERV instrument. Reliability was the most important dimension followed by responsiveness, tangibles, assurance and empathy. All five dimensions were more important to women compared to men. There were also significant differences between genders in terms of factors that affect their choice of which restaurant to frequent. Some of these factors include speed of service, quality of menu items, feeling of safety and security and employee professionalism. The most important factor that influenced the choice of restaurant was overall cleanliness followed by employees' attitude and quality of menu items.

Another study of restaurants in Spain found that the most important factors for return patronage was the quality of food, service and cost/value of the meal, and that this finding was equally true for both male and female customers (Soriano, 2002). Similar results were revealed in a study of Chinese restaurants in the U.S. which identified food and environment as the most important determinant of consumers' repurchase intention, followed by service/courtesy and price/value (Qu, 1997).

In terms of the behavioural consequences of service quality, it has been shown that customers of family-style chain dinner houses in Korea who reported higher perceptions of service quality were more satisfied and higher levels of satisfaction were associated with increased word-of-mouth (Babin *et al.*, 2005). Kivela *et al.* (2000) studied restaurant patrons in Hong Kong and found support for the notion that satisfied customers tend to return. Zeithaml *et al.* (1996) asserted that consumers who reported higher levels of perceived service quality were more loyal to the organization, less likely to switch, more willing to pay higher prices and less likely to complain to others. Boulding *et al.* (1993) also reported that perceptions of service quality influenced word of mouth and repeat

business. Similarly, there are empirical research findings (e.g. Cronin *et al.*, 2000; Qin & Prybutok, 2009; Kim *et al.*, 2009) which indicate that service quality can have a significant influences on both satisfaction and behavioral intentions whereas Tam (2004) found that perceived service quality positively affected customer satisfaction which in turn significantly influenced customer loyalty.

Methodology

This is an exploratory research which aims to gauge the levels of customer-perceived service quality of restaurants in Malaysia using cross-sectional data collected via structured questionnaires. The DINESERVE scale of Stevens *et al.* (1995) was adapted for this purpose. More specifically, the perception-only or "DINESERV.per" version was used. Responses were on a seven-point scale ranging from "strongly disagree" (1) to "strongly agree" (7). Initially, 28 items were used to measure service quality. A face validity check of the survey items was carried out by two services marketing experts. Pilot testing of the questionnaire was also performed using 60 respondents. One culture-specific item, "Use the language that I can understand" was added while two potentially confusing items, "Provide an accurate guest check" and "Makes me feel special", were deleted.

More than 400 questionnaires were distributed to restaurant customers in a Malaysian city who had patronized a restaurant within the past three months. Respondents were asked to select a specific ethnic restaurant (Western, Chinese, Malay or Indian) before answering the questionnaire. The type of restaurants assessed included fine-dining, casual-dining and fast-service restaurants. Quota sampling based on convenience selection process was employed and the main control characteristic was restaurant type (*i.e.* Western, Chinese and Others). For purposes of statistical analysis, the Malay and Indian restaurants were grouped together as "Others" as they were fewer in number.

Findings and Discussions

A total of 342 respondents participated in the survey. Their demographic characteristics are shown in Table 1. Male respondents outnumbered female respondents (61.1 per cent versus 38.9 per cent). Most of the

respondents (83.4 per cent) were aged 26 years old and below, with a large number consisting of students (77.2 per cent). There were 162 (47.4 per cent) respondents having diploma qualification and 118 (34.5 per cent) with degree qualification. One-third of the respondents were Malays, followed by Chinese (22.8 per cent), Ibans (24.6 per cent), Bidayuhs (7.9 per cent) and others (11.4 per cent). 100 respondents (29.2 per cent) assessed Malay restaurants, 127 respondents (37.1 per cent) assessed Chinese restaurants and 115 (33.6 per cent) assessed Malay/Indian restaurants (classified as ‘Others’).

Table 1: Respondent Characteristics

Variables	N	%	Variables	N	%
Gender			Work Status		
Male	209	61.1	Student	264	77.2
Female	133	38.9	Working	78	22.8
Age Group			Race		
17-21	148	43.3	Malays	114	33.3
22-26	137	40.1	Chinese	78	22.8
27-31	23	6.7	Ibans	84	24.6
Above 31	34	9.9	Bidayuhs	27	7.9
			Others	39	11.4
Education Level			Restaurant Type		
Diploma	162	47.4	Western	100	29.2
Degree	118	34.5	Chinese	127	37.1
Others	62	18.1	Others	115	33.6

The adapted scale for measuring restaurant service quality (Stevens *et al.* 1995) was found to be reliable (Table 2). The Cronbach α test was applied to determine the reliability of the data. The overall service quality scale was found to be internally reliable (Cronbach $\alpha = 0.95$) as it exceeds the minimum standard of 0.7 suggested by Nunnally and Bernstein (1994). The Cronbach α values for all the five dimensions, tangibles (0.91), reliability (0.81), responsiveness (0.78), assurance (0.85), and empathy (0.81), were also found to be satisfactory. The item-to-total correlation, which indicates the degree of an item’s relationship to the total score, were more than 0.50 showing that all the attributes of the respective dimensions were reliable. Therefore, the restaurant service quality scale used in this survey has demonstrated its internal consistency in measuring the construct.

Table 2: Reliability Analysis on Restaurant Service Quality

	Dimensions and Items	Cronbach Alpha	Item-total Correlation
	<i>Tangibles (10 items)</i>	0.91	
1	Attractive parking areas and building exteriors		0.614
2	Visually attractive dining area		0.741
3	Décor in keeping with image and price		0.685
4	Staff appear neat and appropriately dressed		0.657
5	Menu is easily readable		0.637
6	Menu is visually attractive and reflects image		0.639
7	Dining area is comfortable and easy to move around		0.604
8	Dining areas are clean		0.732
9	Wash/rest rooms are clean		0.686
10	Comfortable seats in dining room		0.631
	<i>Reliability (4 items)</i>	0.81	
11	Customers are served in the time promised		0.613
12	Employees quickly correct wrong things		0.619
13	Service is dependable and consistent		0.681
14	Employees serve exactly as ordered		0.576
	<i>Responsiveness (3 items)</i>	0.78	
15	Employees provide prompt service		0.602
16	Employee shifts to help in maintaining fast service		0.663
17	Employees give extra efforts to handle customer requests		0.595
	<i>Assurance (6 items)</i>	0.85	
18	Employees able to answer questions completely		0.570
19	Employees make me feel comfortable and confident		0.647
20	Employees able and willing to give information		0.604
21	Personnel well trained, competent and experienced		0.715
22	Restaurant makes me feel personally safe		0.662
23	Employees are supported to do their jobs well		0.641
	<i>Empathy (5 items)</i>	0.81	
24	Employees sensitive to my individual needs and wants		0.584
25	Employees anticipate my individual needs and wants		0.618
26	Employees sympathetic and reassuring		0.583
27	Employees have customers' best interests at heart		0.640
	Overall	0.95	

Table 3 displays the perceptions of respondents of the various dimensions of foodservice quality. Reliability was rated the highest, followed by tangibles, responsiveness, assurance and lastly empathy. In terms of reliability, customers felt that the restaurants were most reliable in terms of serving them exactly what was ordered but relatively less reliable in providing dependable and consistent service, serving food within the time promised and promptly correcting mistakes. For the tangibles dimension, customers felt that the restaurants provided menus that were easy to read, visually attractive and consistent with the image of the restaurant. They also felt that the dining areas were clean, comfortable and easy to move around. Other physical aspects that received higher ratings were the appearance of staff and the comfort of seats. However, the results indicate that customers had lower perception ratings of the attractiveness of the parking area, building exterior and dining area, as well as the cleanliness of wash/rest rooms. This implies that restaurants could do more to improve these aspects of the physical service environment. Other aspects of service that received higher ratings were the promptness of service, the safety of the restaurants and the price and variety of food. Empathy received the lowest perception score out of all the five quality dimensions. This indicates that customers would like the restaurants to be more sensitive to their needs and requirements and be more caring and sympathetic. Compared to the overall mean service quality score of 4.89, customers had relatively high levels of satisfaction (5.28), customer loyalty (5.06) and repurchase intention (5.14), although positive word-of-mouth was slightly lower (4.98). The perception scores provide useful information to the management of food establishments regarding the areas in which customers are satisfied and those which could be improved. The overall service quality score of 4.89 is comparable to that of other studies. For instance, a study of a chain restaurant in the United States by Bojanic and Rosen (1994) based on SERVQUAL reported an overall perception score of 4.93. However, there is still room for improvement as indicated by the individual items of the scale in Table 3.

In terms of the demographic differences of the customers' perceptions, Table 4 shows the summary of the findings for the means analyses (purposely no statistics). The findings results indicate that age and ethnic backgrounds do not seem to have any significant influence on the customer-perceived restaurant service quality. The latter finding is in line with that of Yun and Hing (1995) who had found that ethnic type had

Table 3: Customer Perception of the Restaurant Service Quality

Variables	Means	t-Value
Overall Service Quality	4.89	13.490
<i>Tangibles</i>	<i>4.96</i>	13.060
Attractive parking areas and building exteriors	4.55	6.965
Visually attractive dining area	4.87	13.413
Décor in keeping with image and price	4.87	12.810
Staff appear neat and appropriately dressed	5.04	15.830
Menu is easily readable	5.17	18.074
Menu is visually attractive and reflects image	5.08	16.452
Dining area is comfortable and easy to move around	5.08	16.623
Dining areas are clean	5.09	15.068
Wash/rest rooms are clean	4.90	12.295
Comfortable seats in dining room	5.02	16.263
<i>Reliability</i>	<i>5.02</i>	16.262
Customers are served in the time promised	4.94	13.002
Employees quickly correct wrong things	4.81	11.730
Service is dependable and consistent	4.93	13.273
Employees serve exactly as ordered	5.38	21.594
<i>Responsiveness</i>	<i>4.84</i>	12.009
Employees provide prompt service	5.05	15.324
Employee shifts to help in maintaining fast service	4.85	11.703
Employees give extra efforts to handle customer requests	4.66	9.091
<i>Assurance</i>	<i>4.81</i>	12.290
Employees able to answer questions completely	4.71	10.699
Employees make me feel comfortable and confident	4.93	13.850
Employees able and willing to give information	4.61	8.571
Personnel well trained, competent and experienced	4.79	12.112
Restaurant makes me feel personally safe	5.01	15.424
Employees are supported to do their jobs well	4.82	12.365
<i>Empathy</i>	<i>4.71</i>	10.699
Employees sensitive to my individual needs and wants	4.63	10.055

(continued)

Table 3 (continued)

Variables	Means	t-Value
Employees anticipate my individual needs and wants	4.79	12.165
Employees sympathetic and reassuring	4.65	9.788
Employees have customers' best interests at heart	4.79	12.092
Price of Food	5.01	14.512
Product Variety	5.09	14.878
Overall Customer Satisfaction	5.28	18.698
Customer Loyalty	5.06	14.870
Repurchase Intention	5.14	16.853
Recommend to Others	4.98	13.557

Note: All means are significantly different (at $p = 0.05$) from the mid-point value of 4.00.

no influence on the expectations of customers of fine-dining restaurants. However more definitive research is needed to clarify this issue. Occupation was found to have a significant influence only in terms of the perceptions of tangibles, whereas education level affected only the perceptions of empathy and overall customer satisfaction. This tends to suggest that restaurants that have targeted to serve the higher income and elite groups should emphasize physical appearance and caring, personalized service. As for gender, the only influence was found on perceptions of food variety and overall customer satisfaction.

Table 4: Demographic Differences of the Customer Perceptions

Variables	Gender	Age	Education	Occupation	Race
Service Quality	No	No	No	No	No
Tangibles	No	No	No	Yes	No
Reliability	No	No	No	No	No
Responsiveness	No	No	No	No	No
Assurance	No	No	No	No	No
Empathy	No	No	Yes	No	No
Price of Food	No	No	No	No	No
Product Variety	Yes	No	No	No	No
Overall Customer Satisfaction	Yes	No	Yes	No	No
Customer Loyalty	No	No	No	No	No

* Significance level is $P = 0.05$ (2-tailed).

Analysis of the quality perceptions by restaurant type (Table 5) reveals that customers have higher perceptions of Western restaurants than local restaurants on all the factors investigated in the study. Specifically, they gave significantly higher ratings to Western restaurants in terms of the five service quality dimensions, customer satisfaction and loyalty. Tangibles was the highest rated quality dimension for Western restaurants. This is not surprising given that many Western restaurants in Malaysia have sophisticated and unique décor consistent with their image and the type of cuisine served. However, customers seemed less impressed with the levels of empathy in Western restaurants. This implies that employees of these restaurants could do more to demonstrate better understanding and concern for customers' needs. The findings also show that customers have better impressions of the service in Western restaurants (mean service quality rating of 5.17) compared to local restaurants (mean service quality rating of 4.77). The reliability dimension for local restaurants was given the highest mean perception scores followed by tangibles, while the lowest mean score was for empathy. Just like in Western restaurants, Malaysian customers want more caring and personalized attention from the employees of local restaurants.

Further analysis of local restaurants (Table 6) reveals that Chinese restaurants have higher overall service quality perception ratings compared to other local restaurants. Chinese restaurants were also significantly more highly rated in terms of tangibles, assurance and reliability as well

Table 5: Restaurant Service Quality by Western and Local Restaurant

Variables and Items	Means by		T	P Value
	Restaurant Type			
	Western	Local		
Service Quality	5.17	4.77	4.216*	0.000
Tangibles	5.31	4.83	4.562*	0.000
Reliability	5.24	4.93	2.658*	0.008
Responsiveness	5.11	4.73	2.892*	0.004
Assurance	5.10	4.69	3.733*	0.000
Empathy	4.91	4.64	2.374*	0.018
Price of Food	5.08	4.98	0.664	0.507
Product Variety	5.25	5.03	1.378	0.169
Customer Satisfaction	5.53	5.18	2.354*	0.019
Customer Loyalty	5.34	4.94	2.870*	0.004

* Significant difference at P = 0.05 level (2-tailed)

Table 6: Further Analysis of Restaurant Service Quality by Restaurant Type

Variables	Means by Restaurant Type			F	P Value
	Western	Chinese	Others		
Service Quality	5.17	4.79	4.74	9.179*	0.000
Tangibles	5.31	4.90	4.75	11.533*	0.000
Reliability	5.24	4.96	4.89	3.793*	0.023
Responsiveness	5.11	4.73	4.73	4.251*	0.015
Assurance	5.10	4.70	4.67	7.143*	0.001
Empathy	4.91	4.54	4.72	4.122*	0.017
Price of Food	5.08	5.12	4.83	1.788	0.169
Product Variety	5.25	5.23	4.83	3.828*	0.023
Customer Satisfaction	5.53	5.21	5.14	2.932	0.055
Customer Loyalty	5.34	5.06	4.83	5.389*	0.005

* Significant difference at P = 0.05 level (2-tailed)

as product variety and customer loyalty. Nevertheless, all the three types of restaurants scored the highest in terms of product variety as compared to service quality and price. Western restaurants were rated higher on service quality compared to price. Such a result is expected as Western restaurants generally charge much higher prices than local restaurants while trying to deliver higher standards of service, a strategy which is consistent with their image and positioning as fine-dining establishments. On the other hand, Chinese restaurants received higher ratings on price than service quality. This is reflective of the fact that in Chinese restaurants, service quality is generally less of a concern compared to the quality of the food and affordability of the prices.

The correlations of the various variables were also examined in the study (Table 7). The correlations among the various restaurant service quality dimensions were moderate (0.54 - 0.75, less than 0.8) and thus showing no multi-collinearity problem (for regressions). The dimensions have stronger correlations with the overall service quality perception, implying a satisfactory convergent validity in measuring the construct of the customer-perceived restaurant service quality. This indicates that all dimensions are important and need to be emphasized by restaurants in order to deliver quality service. The individual dimensions were also significantly correlated with overall customer satisfaction and loyalty, although the correlations with customer loyalty were relatively weaker on the whole. The overall customer-perceived service quality was moderately correlated (0.67) with overall customer satisfaction.

Table 7: Correlations Among Restaurant Service Quality, Customer Satisfaction and Loyalty

Service Quality Dimensions	TAN	REL	RES	ASS	EMP	SQ
Tangibles						
Reliability	0.62					
Responsiveness	0.60	0.75				
Assurance	0.68	0.60	0.72			
Empathy	0.54	0.60	0.61	0.65		
Overall Service Quality	0.89	0.81	0.83	0.87	0.77	
Overall Customer Satisfaction	0.60	0.58	0.52	0.56	0.51	0.67
Customer Loyalty	0.51	0.55	0.58	0.58	0.54	0.64

Note: All correlations are significant at 0.01 level (2-tailed)

Conclusions and Implications

This exploratory study has discovered that the customer-perceived restaurant service quality of restaurants in the Malaysian sample was perceived to be satisfactory on the whole. The 342 customers surveyed in this study indicated that they were satisfied with the service, price and variety of food served. Levels of customer loyalty were also relatively high. Although restaurants serving Western cuisine were more highly rated in terms of service quality, they were not perceived to be significantly better in terms of price charged and variety of food served. In terms of the measurement instrument, the adapted DINESERV scale was found to be a reliable scale for measuring restaurant service quality. This contextual survey in Malaysia has therefore contributed to further validation of the reliability of the scale developed by Stevens *et al.* (1995).

The study also highlights the areas of improvement for the various ethnic restaurants. All the types of restaurants had the lowest scores on empathy. This shows that customers still want more caring and personalized service. Local restaurants were rated significantly lower than Western restaurants on all dimensions of service quality as well as customer satisfaction and loyalty. There is therefore still ample room for improvement of restaurant service quality in these establishments.

Customer-perceived restaurant service quality in this study was significantly linked to customer satisfaction and customer loyalty. This reinforces the idea that it is important for restaurants to provide quality service in order to retain customers. For this, all the dimensions of service

quality need management attention as they all contribute towards customers' perceptions of restaurant service quality.

Limitations

This study has various limitations that could be addressed in future research. The sample should cover a wider spectrum of foodservice customers such as working adults and tourists to provide better representation. A longitudinal study will serve to establish causality among foodservice quality, customer satisfaction and customer loyalty. The restaurant service quality construct also needs to be more comprehensively defined and operationalised to enable more effective measurement of performance in the foodservice industry. Finally, the use of appropriate qualitative research such as focus groups is recommended to provide more in-depth understanding of the restaurant service quality construct in a multi-ethnic country such as Malaysia.

Acknowledgement

The contributions of Berken Gill Naga and Deskandar Morjidi in terms of data collection and data entry are hereby acknowledged.

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