CUSTOMER SATISFACTION WITH CAFETERIA SERVICE QUALITY: ASSESSMENT OF SERVQUAL ON THE SATISFACTION OF PUBLIC SECTOR EMPLOYEES

Izuan Abdul Hamid

Ministry of Science, Technology, and Innovation (MOSTI), Putrajaya, Malaysia, wanahkuen@gmail.com

Nurul Hidayana Mohd Noor

Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA (UiTM), Malaysia, hidayana@uitm.edu.my

ABSTRACT

This study examines the relationship between service quality elements—tangibility, reliability, responsiveness, assurance, and empathy—and customer satisfaction with cafeteria services using the SERVQUAL model. It focuses on public sector employees working in government ministries in Putrajaya, Malaysia. Of the 200 questionnaires distributed, 160 (80 percent) were usable for analysis using the Statistical Package for Social Science (SPSS) software. Descriptive analysis shows that the mean score of customer satisfaction and the entire dimension of service quality were high. The correlation test found a significant relationship among the variables. Multiple regression analysis showed that service quality variables accounted for 70.2 percent of the variance in customer satisfaction. Customers were generally satisfied with the service quality in the ministry cafeteria. The findings also revealed that empathy, tangibility, and assurance were the most significant predictor variables. Cafeteria operators are recommended to pay particular attention and concern to customers focusing on physical facilities, equipment, and staff appearance—and be willing to help raise the image of their cafeteria. Further research may examine the use of other methods and/or other attributes such as reasonable prices or loyalty programs to further understand the relationship between service quality and customer satisfaction in cafeteria services.

Keywords: Service Quality, SERVQUAL, Customer Satisfaction, Cafeteria

INTRODUCTION

Customer loyalty is linked to customer satisfaction with service quality (Budur & Poturak, 2021). A loyal customer is said to fix mistakes and appreciates good service (Khan et al., 2022). For example, one goes to a restaurant and orders food. Unfortunately, the service arrives too late, the conditions are dirty, and the food is uncovered. Loyal customers who are unhappy with the service may tell restaurant managers about it, ask about the problem they face, and give them a chance to fix it. However, unsatisfied regular customers may make a complaint to the manager. Worse, they may keep quiet and not return to the restaurant. According to Munoz

et al. (2020), satisfaction is measured through the level of product quality, the quality of service provided, the location of the product or service, and price. Customer satisfaction is paramount for competitive survival (Fida et al., 2020). If customers are given a service that meets the expected evaluation, they will have a favorable opinion and feel positive emotions about the service (Alsheyadi & Albalushi, 2020; Satti et al., 2023).

The relationship between service quality and customer satisfaction has been studied extensively in public and private organizations. Many studies have proven that service quality determines customer satisfaction in many sectors, including banking, hospitality, higher education, health care, tourism, postal services, municipalities, and transportation (Biswas & Verma, 2023; Endeshaw, 2020; Jonkisz et al., 2021). However, the role of service quality as a predictor variable in cafeterias needs to be examined in more detail (Ing et al., 2020; Slack et al., 2020). Therefore, this study was undertaken to fill gaps in the existing literature review. It specifically examined the impact of service quality on customer satisfaction in ministry cafeterias located in Putrajaya, Malaysia.

Putrajaya is a planned city serving as Malaysia's federal governmental administrative center. The government site moved from Kuala Lumpur to Putrajaya in 1999 due to traffic congestion and population density in the Kuala Lumpur area. Therefore, many people visit Putrajaya, including investors, customers, clients, and civil servants. High-quality cafeterias among various ministries and agencies can improve the image of government service management (Abdul Rahman, 2019). Moreover, service quality can also help avoid food poisoning problems (Mensah et al., 2021). Through the Food Act of 1983, the government has outlined Food Hygiene Regulations that food operators must follow. The Food Hygiene Regulations 2009 need to be understood by food operators.

This study adopts the theoretical model called SERVQUAL. According to Parasuraman et al. (1988), service quality refers to the organization's ability to meet or exceed customer expectations where expectations are met. This definition illustrates that service quality is the difference between the expectations and perceptions of the customers of the services provided by an organization. A study by Parasuraman et al. (1988) using SERVQUAL identified five service quality dimensions:

- <u>reliability</u> or the ability to perform the service correctly and accurately and be trusted (Jonkisz et al., 2021);
- <u>assurance</u> or employee knowledge and courtesy that are critical to instilling trust and confidence in customers;
- <u>tangibility</u> or the physical facilities, equipment condition, and personnel appearance of the establishment;
- <u>empathy</u> or the ability of service providers to imagine themselves to be in the shoes of the customer in order to demonstrate concern and care; and
- <u>responsiveness</u> or the willingness of service providers to help customers and perform service immediately.

The main objectives of this study are to:

- (i) measure the relationship between overall service quality and customer satisfaction in cafeteria services,
- (ii) examine the relationship between each of the service quality elements of tangibility, reliability, responsiveness, assurance, and empathy and customer satisfaction with cafeteria services, and
- (iii) identify the most significant predictor of customer satisfaction.

The significance of this study is to help cafeterias to retain, if not grow, customers by being careful when setting up expectations, as failure will cause customer dissatisfaction that

can be easily viral in this age of social media. Competition in the food and beverage (F&B) industry, including cafeterias, is very intense because the barriers to entering this sector are low. Findings from this research can be helpful for entrepreneurs interested in entering the cafeteria business. It is hoped that this study will inspire more research into a major service area, the cafeteria service in Malaysia, that could help strengthen Malaysia's F&B sector.

LITERATURE GAP

Research Gap

Service quality refers to the level of the perception and expectation of different service users (Parasuraman et al., 1988). At the same time, customer satisfaction is a person's happy or disappointed feeling after comparing the perception of a service's performance or results with their expectation. An organization needs to show concern for the quality of service provided to customers because customers will respond positively to the organization by showing trust and support for the organization's products and services. With quality service, they will feel comfortable with the organization and be willing to spread positive word of mouth to other customers. Many studies have proven that service quality determines customer satisfaction in many sectors, including banking, hospitality, higher education, health care, tourism, postal services, municipalities, and transportation (Biswas & Verma, 2023; Endeshaw, 2020; Jonkisz et al., 2021). However, the role of service quality as a predictor variable in cafeterias needs to be examined in more detail (Ing et al., 2020; Slack et al., 2020). While studies also have been conducted on service cafeterias in developed countries, the outcome may not be the same for cafeterias in Malaysia that is still developing and has a different cultural mix. This study thus hopes to close this research gap.

Customer Satisfaction

According to Khan et al. (2022), customer satisfaction is when customer desires, expectations, and needs are achieved. Measuring customer satisfaction is essential in providing a better, more efficient, and effective service (Munoz et al., 2020), as it will increase loyalty and the likelihood of customers repeating purchases (Budur & Poturak, 2021). It has been proven that there is a positive relationship among customer acquisition rate, satisfaction, and loyalty (Alzoubi et al., 2022; Zouari & Abdelhedi, 2021). The high service brand features offered by the company also determine customer satisfaction. A study by Fida et al. (2020) stated that customers see high quality service or product as closely related to positive satisfaction.

Business success depends on customer service. Businesses must objectively give customers what they want by learning their needs (Biswas & Verma, 2023). Committing to listening, understanding, and serving customers can produce satisfied customers and increase profits (Ing et al., 2020; Slack et al., 2020). Cafeterias and restaurants as businesses also value positive customer satisfaction. If they are appreciated, customers will not change to another eatery establishment (Kumar et al., 2021).

According to Kim et al. (2022), customer satisfaction refers to a person's happy or disappointed feeling that comes from a comparison between the effect of a performance and customer expectations. Since the customer aims to have the best quality product or service, (Satti et al., 2023), customer satisfaction has become integral to the company's vision, mission, purpose, positioning statement, etc. Offering quality product or service is central to maintaining and improving good relations between an establishment and their customers (Munoz et al., 2020). With the current business market being increasingly competitive due to the emergence of various businesses, including cafeterias, customer satisfaction can go a long way to a profitable business and an increased market share. Satisfied customers attract new customers, increase brand awareness, and strengthen the brand (Satti et al., 2023), leading to increase sales

and profits, growth in customer reach, and expansion of the market share (Biswas & Verma, 2023).

SERVQUAL Model

Previous scholars have provided several theories and models for evaluating service quality as the central element of customer satisfaction. These include the Nordic model by Gronroos (1984), the SERVQUAL model by Parasuraman et al. (1985), the hierarchical model by Brady and Cronin (2001), and the multilevel model by Dabholkar et al. (1996) (as cited in Seth et al., 2005). The SERVQUAL method has become an integral part of customer monitoring and has many advantages. These range from enabling service quality assessment to tracking customer expectations and perceptions over time. SERVQUAL also enables comparing competitors. It has a complete measurement of service quality, customer-centric perception, analytical capability to identify gaps, comparative analysis for benchmarking, and actionable intuitions for enhancement (Mamta & Kumar, 2024). The research method used by the previous researchers in measuring the SERVQUAL model is dominated by the survey approach (Mamta & Kumar, 2024).

The SERVQUAL model has been adopted in this study to measure customer satisfaction with the quality of cafeteria services. SERVQUAL measurement aims to measure performance levels in marketing and is subsequently widely used in various fields (Raza et al., 2020). It thus can be used as a tool to measure the level of customer satisfaction. By collecting customer perception of service quality data, companies can understand whether customers are satisfied with the service provided (Uluskan, 2023). SERVQUAL identifies potential gaps between expectations and perceptions in service delivery (Shi & Shang, 2020). It helps service providers understand customer expectations and perceptions of the services provided (Jonkisz et al., 2021). The strengths of the SERVQUAL method are it (Biswas & Verma, 2023; Endeshaw, 2020):

- (1) combines relevant dimensions of service quality,
- (2) produces reliable and valuable data,
- (3) can compare the quality of service among competitors, and
- (4) can identify problems to be fixed.

Arguably the most important feature of the SERVQUAL method is that its primary purpose is to understand and improve customer service quality (Parasuraman et al., 1988). By understanding customer perceptions of service quality, companies can identify strengths and weaknesses in their operations. With that, the SERVQUAL model can help increase customer satisfaction, customer loyalty, and the company's reputation and competitive advantage (Alsheyadi & Albalushi, 2020; Macieira et al., 2020; Peitzika et al., 2020).

Five dimensions of SERVQUAL have been utilized in this study: tangibility, reliability, assurance, responsiveness, and empathy (Parasuraman et al., 1988). Each dimension is assessable. Tangibility refers to physical facilities, equipment, and the appearance of personnel involved in providing services (Suhud et al., 2020). It is an element that can be seen or felt. Therefore, this dimension should be emphasized because it reflects an organization's effective service quality. Among the components found in this dimension are the use of modern equipment, cleanliness, tidiness, comfort, and attractive looks. For example, creating an Instagramable and aesthetically pleasing environment can attract customers and increase the social media exposure of an establishment, which, in turn, will increase brand awareness, customer engagement, and sales (Alsheyadi & Albalushi, 2020). Sharing images on social media can also generate more interest in the cafe and thus bring in new customers. Apart from the physical condition of the place, honest service could suggest the appearance of neat, clean, fragrant, friendly, and skillful employees (Jonkisz et al., 2021).

The reliability dimension means the ability to perform the service correctly and accurately. This measures the stability of the company's performance and how reliable the company is (Mensah et al., 2021).. A company is best to keep promises to increase the level of customer trust in their company. Reliability is also known as the ability of a company or organization to perform its services accurately and reliably as promised (Peitzika et al., 2020), and this would significantly influence customer satisfaction (Suhud et al., 2020). For example, if the company can keep its promises, customer satisfaction will increase (Tuncer et al., 2021). Reliability is thus a critical dimension of service quality (Wu et al., 2020)

Responsiveness refers to a quick response and the ability to provide feedback if the customer has a problem with the company (Morita et al., 2020). It is about the willingness to act to help customers and perform prompt service (Ing et al., 2020). Employees serve customers and provide fast customer service. Customers will negatively perceive service quality if employees make customers wait without an acceptable reason (Mensah et al., 2021). One of the reasons Malaysians like to eat at mamak restaurants is the speed of the service. Employees are willing to help customers by providing quick service and informing them how long they should wait to get help (Wu et al., 2020). According to Uluskan (2023), the response dimension refers to the desire and readiness of staff to help and provide immediately the necessary services to customers.

The assurance dimension means the employee's knowledge, courtesy, and ability to instill trust and confidence in the customer. Companies must ensure that their employees are well-trained and knowledgeable about their duties (Tuncer et al., 2021). Employees must respond courteously to customer complaints, inquiries, and feedback (Ing et al., 2020). Skilled employees will ensure that their customers are given a good and quick response to their problems. This is one alternative to providing trust and assurance to customers (Wu et al., 2020). But this assurance dimension also encompasses other related components. Food premises operators must also maintain cleanliness of the premises of the sale, the preparation of healthy and safe food, and the preparation of food in the correct serving size according to individual needs (Mokti & Balwi, 2022). This recognition also involves the quality of the food and its nutritional value. The relationship between assurance and customer satisfaction has been confirmed by several studies (Mensah et al., 2021). Assurance depends on communication skills, credibility, competence, courtesy, and safety (Uluskan, 2023). For example, BeSS (Bersih, Selamat, dan Sihat) is the Malaysian Ministry of Health initiative for all food premises operators. When the cafeteria is given the BeSS recognition, the food prepared can be considered as clean and safe for consumption as well as having health value.

The last SERVQUAL dimension is empathy, meaning the individual attention given by the service provider to the customers. Empathy includes communication between employees and customers, understanding customer needs, and accessing and relating to the situation of the customers. AlOmari (2021) stated that empathy is about the type of individual attention that companies give to their customers. Empathy can also be defined as the company's ability to provide the correct individual attention to the customers (Limna & Kraiwanit, 2022). Ultimately, it is about the way the company cares and gives individual attention to their customers that makes the latter feel unique and valued. Thus, a food premise operator must train their waiters and waitresses to be friendly, always smiling, patient, mentally agile, fast and efficient (Tuncer et al., 2021; Wu et al., 2020).

Based on the above discussion of the five components of the SERVQUAL method, this study's research hypotheses are as follows:

- H1: Tangibility positively and significantly affects customer satisfaction with cafeteria services.
- H2: Reliability positively and significantly affects customer satisfaction with cafeteria services.

- H3: Responsiveness positively and significantly affects customer satisfaction with cafeteria services.
- H4: Assurance positively and significantly affects customer satisfaction with cafeteria services.
- H5: Empathy positively and significantly affects customer satisfaction with cafeteria services.

Figure 1 below shows a theoretical framework for studying SERVQUAL's tangibility, reliability, responsiveness, assurance, and empathy in determining customer satisfaction with cafeteria service.

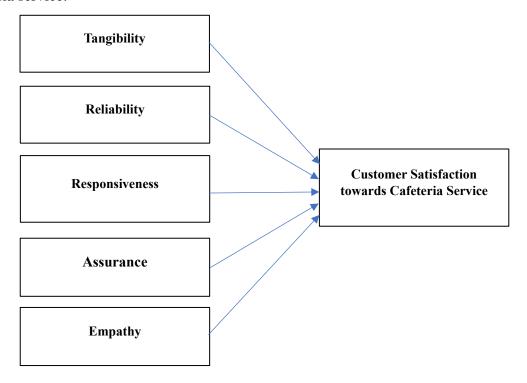


Figure 1: Research Framework (Adapted from Parasuraman et al., 1985)

METHODOLOGY

The design of this study uses a quantitative survey method of questionnaire for data collection because the study aimed at determining satisfaction with cafeteria service from Malaysians, especially those frequenting cafeterias in the Putrajaya area. This research follows Green's (1991) thumb rule for calculating an acceptable sample size where N < 50 + 8m for regression analysis, with m as the number of predictor variables. Based on the data disclosed by the Department of Statistics of Malaysia, there is an estimated 1.5 civil servants in Malaysia. Applying Green's sample calculation, which is > 50 + 8x5, the sample size would be 90 participants. Our plan to distribute 200 questionnaires should be sufficient to cover the possibility of many in the sample not responding. Since this study used multiple regression analysis, the sample estimation is also based on the statistical requirement.

This study employed a convenience sampling technique to select a sample from a population based on elements that were easy to obtain. One advantage of convenient sampling is that data can be collected quickly and cheaply.

Customer satisfaction was measured using an adapted scale from Saad Andaleeb and

Conway (2006). This instrument is divided into three parts: PART A: demographic profile; PART B: service quality dimensions, and PART C: customer satisfaction. Parts B and C used a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Table 1 summarises the instruments for variable measurement.

Table 1: Measurement of the Variables

Variable	Item
Tangibility	1. Seating availability
	2. Clean and comfortable dining areas
	3. Well-dressed staff members
	4. Easily readable menu
	5. Adequate cutlery and tissues
Reliability	1. Fast service as promised.
	2. Dependability and consistency.
	3. Reasonable bills.
	4. Accuracy of customer's order.
Responsiveness	 Availability of extra employees during rush hour
	2. Prompt and quick service.
	3. Willingness to help and handle customers'
	special requests.
Assurance	Customer feel comfortable in transacting with employees
	2. Customers feel safe with financial transactions
	3. Employees are consistently courteous
	4. Employees know how to answer questions
	from customers.
Empathy	1. Employees are sensitive and anticipate customer needs and wants rather than always relying on policies and procedures.
	2. Employee ability to make customers feel comfortable.
	3. Employees are sympathetic and reassuring if
	something is wrong with a customer.
	4. Employees know that customers' best interests are at heart.
Overall Customer	1. Overall, customers were satisfied with their
Satisfaction	cafeteria experience
	2. Customers would return to cafeteria in future.
	3. Customers would recommend cafeteria to
	others.

The data analysis technique used in this research includes (1) testing preliminary

requirements, (2) testing the correlation, and (3) regression analysis. A reliability test is performed first to show whether an instrument can be trusted as a data collection tool. The Cronbach alpha value > 0.80 is acceptable and reliable (Gliner & Morgan, 2000). The normality test was then performed to ensure the data collected was distributed normally. Kline (2005) suggests a kurtosis value of \pm 1 is excellent for most psychometric uses, but \pm 2 is usually sufficient. This study uses a deviation value of \pm 2. Kline (2005) suggests the kurtosis range value is \pm 10 for normal data

FINDINGS

Demographic Profile

Table 2 summarises the profile of respondents collected in the study. After three months of data collection, the study received 160 returned surveys with a response rate of 80%. Wu et al. reported that mean response rates above 60% are acceptable for survey studies. In this study, most respondents were female (n=90 or 56.3%), and 70 were male (43.8%). Half of the respondents were from the implementation group (n=77,48.1%), followed by the management and professional group (n=63 or 39.4%) and top management group (n=20 or 12.5%). Most respondents were permanent employees (n=129 or 80.6%), followed by contract employees (n=31 or 19.4%). Lastly, many of the respondents ate at the cafeteria four times a week (n=61 or 38.1%), followed by twice a week (n=37 or 23.1%), three times a week (n=30 or18.8%), every working day (n=22 or 13.8%), and once a week (n=10 or 6.3%).

Table 2: Demographic Profile

No.	Profile	Table 2. Demograp	Frequency	Percentage (%)
110.	Tionic		(n)	r creemage (70)
1	Gender	Male	70	43.8
		Female	90	56.3
2	Position grade	Implementation Group	77	48.1
	C	Management &	63	39.4
		Professional Group		
		Top Management	20	12.5
		Group		
3	Position Level	Permanent	129	80.6
		Contract	31	19.4
4	Frequency of	Once	10	6.3
	eating in the	Twice	37	23.1
	cafeteria	Three	30	18.8
		Four	61	38.1
		Every working day	22	13.8

Descriptive Analysis & Preliminary Assumptions

Descriptive analysis examined the variables' mean (M) and standard deviation (SD). The range of 1.00-2.00 indicated a low level; 2.01-3.00, medium-low; 3.01-4.00, medium-high; and 4.01-5.00, high level. Table 3 (next page) shows the descriptive analysis results for service quality and customer satisfaction. Tangibility recorded the highest mean value, at 4.359 and a standard deviation of 0.351. This indicates that the customer agreed that the cafeteria's tangibility aspect was high. Next, all service dimensions also recorded a high rate among consumers. These include empathy (\bar{x} =4.342, SD=0.372), responsiveness (\bar{x} =4.282, SD=0.423), reliability (\bar{x} =4.229, SD=0.382), and assurance (\bar{x} =4.229, SD=0.382). Based on Table 3, Cronbach's Alpha value for tangibility is 0.703; reliability is 0.729; responsiveness is 0.748; assurance is

0.744; and empathy is 0.745. All of these exceeded 0.80 and are considered reliable. This study also met the normal assumptions based on the normality test results.

Table 3: Descriptive Analysis, Reliability, & Normality Results

Variable	•	•	Cronbach's	Skewness	Kurtosis
	Mean	SD	Alpha		
Independent					
Variable	4.359	0.351	0.703	-2.192	5.697
Tangibility	4.229	0.382	0.729	-2.483	8.875
Reliability	4.282	0.423	0.748	-2.474	9.054
Responsiveness	4.213	0.376	0.744	-0.649	1.862
Assurance	4.342	0.372	0.745	-2.796	9.127
Empathy					
Dependent Variable					
Customer					
Satisfaction	4.363	0.323	0.692	-1.461	3.432

Correlation Analysis

Table 4: Pearson Correlation Results

		Customer Satisfaction
Tangibility	Pearson Correlation	0.756**
	Sig. (2-tailed)	0.000
	N	160
	Pearson Correlation	0.717^{**}
Reliability	Sig. (2-tailed)	0.000
-	N	160
Responsiveness	Pearson Correlation	0.640^{**}
-	Sig. (2-tailed)	0.000
	N	160
Assurance	Pearson Correlation	0.545**
	Sig. (2-tailed)	0.000
	N	160
Empathy	Pearson Correlation	0.784^{**}
	Sig. (2-tailed)	0.000
	N	160

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 4 above shows a positive relationship between tangibility and customer satisfaction (r= 0.756**, p=0.000, p < 0.05), as well as for each of the remaining four SERVQUAL dimensions in its relationship with customer satisfaction. Therefore, all five hypotheses of this study were accepted.

Regression Analysis

Table 5: Multiple Regression

Variable	Beta (β)	Sig.	Tolerance	VIF
		(<i>p</i>)		
Tangibility	0.343	0.000	0.339	2.952
Reliability	-0.041	0.653	0.226	4.416
Responsiveness	0.064	0.391	0.347	2.883
Assurance	0.251	0.000	0.752	1.329
Empathy	0.388	0.000	0.194	5.152
\mathbb{R}^2	0.711			
Adjusted R ²	0.702			
F Change	74.395			
Sig.	0.000			

Before regression interpretation, the multicollinearity test needs to be fulfilled first. It is a test to ensure no collinearity between independent variables in a regression model. If the VIF value is less than ten and the Tolerance value is more than 0.01, it can be firmly concluded that there is no multicollinearity problem. Based on Table 5, there is no multicollinearity problem in this study. Adjusted R square (R²) is the coefficient of determination that explains how far the independent variables can explain the dependent variable. R square has a value between 0 and 1, with the provision that the closer it is to number 1, the better. From Table 5 above, the adjusted R square value of 0.702 means that the independent variable can explain 70.2% of the spread of the dependent variable. From the results, the highest beta value is for empathy (0.388), which revealed that empathy is the most influential variable in customer satisfaction with cafeteria services.

DISCUSSION

The overall finding of this study clearly indicates that good service quality is important to customer satisfaction, which, by extension, should strengthen the cafeteria business. When the customer service is good, the customer will feel happy, and this will enhance the cafeteria's reputation (Alsheyadi & Albalushi, 2020; Jonkisz et al., 2021). As for the five specific dimensions of service quality following the SERVQUAL method (i.e., tangibility, responsiveness, assurance, and empathy), they all were individually found to have a positive effect on customer satisfaction toward cafeteria services. All five hypotheses of the study have been upheld. The findings of this study support those performed by Ing et al. (2020), Mensah et al. (2021), Mokti and Balwi (2022), and Wu et al. (20200.

Tangibility as a SERVQUAL dimension can be reflected in an organization's adequate service quality; any inadequacy can be easily detected as a weakness in meeting the customer's needs (Suhud et al., 2020). Reliability focuses on the ability of service staff to keep promises by providing quality service to customers. Elements like being able to solve customer problems and provide services as promised are the main measures in the delivery of quality services (Tuncer et al., 2021). Responsiveness refers to the willingness of those involved in providing services to help customers and provide service as quickly as possible (Ing et al., 2020). Therefore, the service provider needs to take care of the environment and equipment for the convenience of customers. Modern equipment can facilitate and speed up service matters and affect the service delivery system and procedures. Assurance depends on service providers' communication skills, credibility, competence, and courtesy. Staff knowledge and friendliness in providing service can offer customers assurance. Finally, empathy is a positive influence on customer satisfaction too because it is based on staff ability to imagine themselves in the

situation of a customer and meet his/her needs (Tuncer et al., 2021; Wu et al., 2020). When the above optimal service quality dimensions are provided to consumers, they will build customer loyalty (Suhud et al., 2020).

Finally, the study found that empathy to be the most significant predictor customer satisfaction as empathizing with customer needs can increase customer satisfaction (Peitzika et al., 2020). Customers appreciate service providers when the latter can identify problems in service, inform customers of the inconvenience, and offer solutions to problems (Wu et al., 2020).

As practical contributions, the findings of this study can be used as a guide for service providers to improve the design, administration, and operation of cafeteria service. The management needs to pay attention to the content and service quality training programs for employees.

CONCLUSION

The importance product suppliers or service providers place on customer satisfaction cannot be underestimated at all even in the cafeteria business. Service quality is the primary basis for knowing the level of customer satisfaction. The findings of this study confirm that management's willingness to empathize with the customer's wishes increases customer satisfaction. Clearly, cafeteria operators need to give priority to providing high-quality service. To help them measure satisfaction and service quality, food operators can conduct customer surveys periodically. They can also use social media or complaint box to monitor customer response or feedback.

Future research into customer satisfaction with cafeterias can be improved or strengthened. For example, research can look into cafeteria customers outside of the public administrative capital of Malaysia that is Putrajaya by studying those of the private sector, studies. Research should also consider using other methods such as semi-structured interviews, observation, or focus group discussions. Finally, future research should also examine the pricing impact on customer satisfaction with cafeterias.

Acknowledgments

The authors would like to thank everyone who took part in this study.

REFERENCES

- Abdul Rahman, A. R. (2019). Assessing healthy cafeteria (Cafeteria Sihat) attributes, perceived value, eating behavior, satisfaction, and post-purchase behavior among customers in public hospitals [Doctoral dissertation, Universiti Teknologi MARA, UiTM]. Retrieved from https://ir.uitm.edu.my/id/eprint/82829/
- Alomari, F. (2021). Measuring gaps in healthcare quality using SERVQUAL model: Challenges and opportunities in developing countries. *Measuring Business Excellence*, 25(4), 407–420.
- Alsheyadi, A. K., & Albalushi, J. (2020). Student service quality and student satisfaction: the mediating effect of cross-functional collaboration. *The TQM Journal*, 32(6), 1197-1215.
- Alzoubi, H. M., Ahmed, G., & Alshurideh, M. (2022). An empirical investigation into the impact of product quality dimensions on improving the order-winners and customer satisfaction. *International Journal of Productivity and Quality Management*, 36(2), 169-186.

- Biswas, A., & Verma, R. K. (2023). Augmenting service quality dimensions: Mediation of image in the Indian restaurant industry. *Journal of Foodservice Business Research*, 26(3), 496-527.
- Brady, M.K., & Cronin, J.J. Jr. (2001). Some New Thoughts on Conceptualizing Perceived Service Quality: A Hierarchical Approach. Journal of Marketing, 65(3), 34-49. doi: 10.1509/jmkg.65.3.34.18334
- Budur, T., & Poturak, M. (2021). Employee performance and customer loyalty: Mediation effect of customer satisfaction. *Middle East Journal of Management*, 8(5), 453-474.
- Endeshaw, B. (2020). Healthcare service quality-measurement models: A review. *Journal of Health Research*, 35(2), 106-117.
- Fida, B. A., Ahmed, U., Al-Balushi, Y., & Singh, D. (2020). Impact of service quality on customer loyalty and customer satisfaction in Islamic banks in the Sultanate of Oman. *Sage Open*, 10(2), 2158244020919517.
- Gliner, J. A., & Morgan, G. A. (2000). Research methods in applied settings: An integrated approach to design and analysis. Mahwah, NJ: Lawrence Erlbaum.
- Green, S. B. 1991. How many subjects does it take to do a regression analysis? *Multivariate Behavioural Research*, 26, 499–510.
- Grönroos, C. (1984), A Service Quality Model and its Marketing Implications. *European Journal of Marketing*, Vol. 18 No. 4, pp. 36-44. doi.org/10.1108/EUM0000000004784
- Ing, P. G., Zheng Lin, N., Xu, M. & Thurasamy, R. (2020). Customer loyalty in Sabah full-service restaurant. Asia *Pacific Journal of Marketing and Logistics*, 32(7), 1407-1429.
- Jonkisz, A., Karniej, P., & Krasowska, D. (2021). SERVQUAL method as an "old new" tool for improving the quality of medical services: A literature review. *International Journal of Environmental Research and Public Health*, 18(20), 10758.
- Khan, R. U., Salamzadeh, Y., Iqbal, Q., & Yang, S. (2022). The impact of customer relationship management and company reputation on customer loyalty: The mediating role of customer satisfaction. *Journal of Relationship Marketing*, 21(1), 1-26.
- Kim, J., Lee, M., Kwon, W., Park, H., & Back, K. J. (2022). Why am I satisfied? See my reviews—Price and location matter in the restaurant industry. *International Journal of Hospitality Management*, 101, 103111.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd Ed.). New York: Guilford Press
- Kumar, P., Mokha, A. K., & Pattnaik, S. C. (2021). Electronic customer relationship management (E-CRM), customer experience and customer satisfaction: Evidence from the banking industry. *Benchmarking: An International Journal*, 29(2), 551-572.
- Macieira, F., Oliveira, T., & Yanaze, M. (2020). Models of satisfaction antecedents: A brief review. An integrative literature review of the most discussed satisfaction models in marketing studies. *International Journal of Services and Operations Management*, 36(3), 348-359.
- Mamta, & Kumar, V. (2024). A systematic review of library service quality studies: Models, dimensions, research populations and methods. *Journal of Librarianship and Information Science*, 56(2), 534-546.
- Mensah, B. A., Achio, S., & Asare, I. O. (2021). Effect of service quality on customer satisfaction in selected cafeterias: A structural equation modeling approach. *International Journal of Tourism and Hospitality Management in the Digital Age (IJTHMDA)*, 5(2), 1-16.
- Mokti, H. A., & Balwi, M. A. W. F. M. (2022). Halal food quality: An analysis of relevant guidelines and regulations in Malaysia. *Journal of Fatwa Management and Research*, 27(2-SE), 37-55.

- Morita, T., Kashiwagi, N., Yorozu, A., Suzuki, H. & Yamaguchi, T. (2020). Evaluation of a multi-robot cafe based on service quality dimensions. *The Review of Socionetwork Strategies*, 14, 55-76.
- Munoz, C., Laniado, H., & Córdoba, J. (2020). Development of a robust customer satisfaction index for domestic air journeys. *Research in Transportation Business & Management*, *37*, 100519.
- Parasuraman A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1),12–40.
- Peitzika, E., Chatzi, S., & Kissa, D. (2020). Service quality expectations in the fitness center context: A validation of the expectations component of the SERVQUAL scale in Greece. *Services Marketing Quarterly*, 41(2), 89-104.
- Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet banking service quality, e-customer satisfaction, and loyalty: The modified e-SERVQUAL model. *The TQM Journal*, 32(6), 1443-1466.
- Saad Andaleeb, S. and Conway, C. (2006) Customer Satisfaction in the Restaurant Industry: An Examination of the Transaction-Specific Model. *Journal of Services Marketing*, 20, 3-11. doi.org/10.1108/08876040610646536
- Satti, Z. W., Babar, S. F., & Parveen, S. (2023). Role of customer satisfaction as a mediator between sensory marketing and customer loyalty: A case of Pakistani restaurant industry. *Journal of International Food & Agribusiness Marketing*, 35(5), 559-581.
- Seth, N., Deshmukh, S. G., & Vrat, P. (2005). Service quality models: A review. *International Journal of Quality & Reliability Management*, 22(9), 913-949.
- Shi, Z., & Shang, H. (2020). A review on quality of service and servqual model. In HCI in Business, Government and Organizations: 7th International Conference, HCIBGO 2020, Held as Part of the 22nd HCI International Conference, HCII 2020, Copenhagen, Denmark, July 19–24, 2020, Proceedings 22 (pp. 188-204). Springer International Publishing.
- Slack, N., Singh, G., & Sharma, S. (2020). The effect of supermarket service quality dimensions and customer satisfaction on customer loyalty and disloyalty dimensions. *International Journal of Quality and Service Sciences*, 12(3), 297-318.
- Suhud, U., Allan, M., Wibowo, S. F., Sabrina, E., & Willson, G. (2020). Measuring customer satisfaction of a café and coffee shop colony at a traditional market. *Journal of Foodservice Business Research*, 23(1), 78-94.
- Tuncer, I., Unusan, C., & Cobanoglu, C. (2021). 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.
- Uluskan, M. (2023). Structural equation modelling–artificial neural network-based hybrid approach for assessing quality of university cafeteria services. *The TQM Journal*, 35(4), 1048-1071.
- Wu, T. H., Weng, S. J., Lin, Y. T., Kim, S. H., & Gotcher, D. (2020). Investigating the importance and cognitive satisfaction attributes of service quality in restaurant business-a case study of TASTy steakhouse in Taiwan. *Journal of Foodservice Business Research*, 23(4), 263-284.
- Zouari, G., & Abdelhedi, M. (20210. Customer satisfaction in the digital era: Evidence from Islamic banking. *Journal of Innovation and Entrepreneurship*, 10(1), 1-18.