

[POM 10] DKG6 CAFETERIA'S SERVICE QUALITY ON STUDENTS' SATISFACTION

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ABSTRACT

Service quality is a comparison between the customer expectations and service performance provided by the service provider. Due to its importance and the pressure to sustain the customer loyalty, it is critical that a customer satisfaction study on how DKG6 cafeteria satisfies its customers' needs and wants is conducted. Referring the study, this article reflects critical outcomes in view of the following objectives: (1) to identify the student satisfaction level in view of DKG 6 cafeteria's service quality and (2) to compare the level of satisfaction between male and female students on DKG 6 Cafeteria. The respondents were the students in STML which include POM, MOT, and LOGTRANS students. A set of questionnaires derived from SERVQUAL instrument developed by Parasuraman were distributed. Is expected that outputs reflect student satisfaction level and there are the different levels of student satisfaction on each service quality's variable provided by DKG 6 Cafeteria in view of gender attribute.

Keywords: *SERVQUAL, student satisfaction, UUM STML, DKG6 Cafeteria*

INTRODUCTION

According to Ahmad (2015), service quality has been defined as the antecedent of customer satisfaction, and in return with customer royalty and retention. Thus, service quality has become the core marketing priority to achieve because it is the prerequisite of consumer loyalty, such as repeat sales and positive word-of-mouth (Ryu et al., 2012). Service quality has a direct impact on customer satisfaction and an indirect impact on customer retention and also other factors that must be taken into account such as the impact on the firm's image or even the perception of price fairness (Reza & Daniela, 2013). So, the investigation on all the service quality dimensions can assist the cafeteria to not only fulfil the basic needs of the students but these dimensions are also important aspects that will provide the competitive advantages for the business in the long run.

Many previous researches had been conducted to determine the service quality, food quality and customer satisfaction in different scopes at different countries (Ahmad, 2015), such as fast food restaurant industry in Malaysia (Intan et al., 2016), restaurant Sagarmatha in Vantaa (Ghimire, 2012), the hotel industry in Russia (Bekir & Halil, 2015) and so on. The findings of these researches also shows that the service quality is positively significant in influencing the customers' satisfaction.

Problem statement

DKG 6 Cafeteria is one of the facilities in UUM because it supplies one of the basic human needs which is food and beverage to the students around STML. Therefore, besides the food quality, the quality of service provided should also be able to satisfy the students' demands.

However, the service quality is not on a satisfactory level as the ideal condition as some student observed and complained about the environment not being clean; the equipment such as tables and chairs are not in good condition, there are long waiting times at peak hours and so on.

In order to respond to these problems, the study is going to propose on some improvement actions for the service quality variables which needs to be enhanced by cafeterias in order to sustain their customers' (students) loyalty by adopting the SERVQUAL instrument developed by Parasuraman.

Research questions

RQ₁: What is the level of student satisfaction on the service quality provided by DKG 6 cafeteria?

RQ₂: How is the level of student satisfaction on DKG 6 cafeteria's service quality in different gender attributes?

Research Objectives

RO₁: To identify the student satisfaction level in view of DKG 6 cafeteria's service quality.

RO₂: To compare the level of satisfaction between male and female students on DKG 6 cafeteria's service quality.

LITERATURE REVIEW

This section focuses on reviewing the literature of previous studies done in relation to service quality, customer satisfaction and the influence of service quality on customer satisfaction.

Service quality (independent variable)

Service quality determines the business success or failure for some organizations. Delivering high quality service is important for the success of an organization especially in restaurant industry. Due to fierce competition, organizations need to develop service quality as one of the key performances to differentiate themselves with other competitors. SERVQUAL is one of the methods that is widely adopted to measure the service quality and customer satisfaction. SERVQUAL is developed by Parasuraman et al. (1988) and is based on the proposition that service quality can be measured as the gap between the service that the customers expected and the perception on the service performance received. (Landrum et al., 2009). According to Ramseook (2012) , it aims to help service managers diagnose and improve the quality of services under their control. The model on which SERVQUAL is proposed states that customers evaluate the quality of a service across five distinct dimensions (Ramseook, 2012).

There are total of five dimensions included in the SERVQUAL model which are Tangible, Reliability, Responsiveness, Assurance and Empathy. Tangible is defined as physical appearance and representations of the service (Yarimoglu, 2014), such as the equipment and facility provided by provider. Reliability can be defined as the ability of a firm to perform promised services dependably and accurately (Landrum et al., 2009). It means that the firm can perform the service right the first time and honors its promises. Responsiveness is concerned with the willingness or readiness of employees to provide helpful service, and the timeliness of the service to help customers solve their problems (Landrum et al., 2009). Assurance is the ability of the employee to inspire trust and confidence in customers (Landrum et al., 2009). Lastly, Empathy refers to the degree of caring and individualized attention provided to customers (Landrum et al., 2009).

Student (customer) satisfaction (dependent variable)

Students are the main customers for DKG 6 cafeteria. As a customer, satisfaction is a greatest interest because satisfaction is linked to purchase loyalty. Thus the wants and needs of students must be met so that foodservice business can be successful in maintaining their customer base and financial stability (Liang & Zhang, 2009). Previous studies show that customer satisfaction is important to foodservice sector because it leads to repeated patronage, brand loyalty, and brand new customers through word-of-mouth promotion (Ramseook, 2012). Hence, studies investigating these links have been numerous and the literature reveals evidence of strong relationships between customer satisfactions with service quality, other cafeteria attributes and repeat-purchase intentions.

Influence of SERVQUAL towards student satisfaction

SERVQUAL has a major influence towards customer satisfaction compared to other attributes such as food quality, especially in the restaurant or cafeteria industry. Service quality has been found to be important in influencing both customer satisfaction and customer retention (Ramseook, 2012). In other research papers, service quality is influenced by expectation, process quality and output quality that is defined by customers who had experienced the service and used the experience and feeling to form a judgement (Dayang & Rozario, 2009). Based on past researches, the success of restaurant businesses relies on providing excellent service quality, create customer value, and customer satisfaction, which in turn enhances customer behavioral intentions (Ramseook, 2012). Another research paper shows that when the perception of service quality is high, the customer satisfaction is high and vice versa (Dayang & Rozario, 2009).

METHODOLOGY

This section will present the research methodology used in this paper which covers the theoretical framework, research scope, data collection method, and instrument reliability.

Theoretical framework

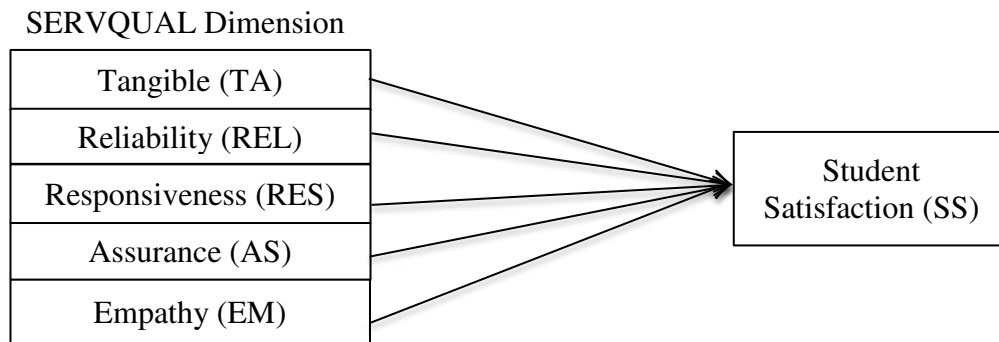


Figure 6

Theoretical framework: Relationship between service quality and customer satisfaction

The theoretical framework adopted in this paper is the SERVQUAL model which is developed by Parasuraman et al. (1988). It explains the relationship and also helps to identify the effects of service quality on student satisfaction. The SERVQUAL framework consists of 5 dimensions serving as independent variables which are Tangible (TA), Reliability (REL), Responsiveness (RES), Assurance (AS) and Empathy (EM) as well as a dependent variable which is Student Satisfaction (SS). According to the SERVQUAL model adopted in this paper, the hypothesis is developed as below:-

H₁: The level of student satisfaction on DKG 6 cafeteria's service quality is in a moderate level.

H₂: There are different levels of satisfaction between male and female students on DKG 6 cafeteria's service quality.

Scope

The study scope of this paper is targeted on STML students which includes students that are taking POM, MOT & LOGTRANS course. The student satisfaction level on DKG 6 cafeteria's service quality will be identified based on STML students' experience with the cafeteria.

Data collection

The quantitative method is used for data collection which is questionnaire survey through online Google form. A total of 120 questionnaires were distributed equally across POM, MOT and LOGTRANS students (40 students for each course). As a result, there are 100 set of responses received, which represents an 83% respond rate. Lastly, all 100 sets were valid for analysis. In terms of instrument, there are a total of 24 items which are all related in terms of students' awareness, students' perceptions, variables' technical aspect and students' expectation included in the questionnaire to collect data where each independent variable and dependent variable consists of 4 items.

Reliability of the instrument

Table 1
Cronbach's Alpha scores for variables

| Variables | No. of Items | Cronbach's Alpha |
|----------------------|--------------|------------------|
| Tangible | 4 | 0.746 |
| Reliability | 4 | 0.700 |
| Responsiveness | 4 | 0.714 |
| Assurance | 4 | 0.798 |
| Empathy | 4 | 0.745 |
| Student Satisfaction | 4 | 0.913 |

According to Ahmad (2015), when the Alpha value obtained reaches 0.7 and above, the scale of instrument is reliable. The Cronbach's Alpha of the independent variables are as below; Tangible obtained 0.746, Reliability obtained 0.7, Responsiveness obtained 0.714, Assurance obtained 0.798 and Empathy obtained 0.745. On the other hand, the alpha value for student satisfaction is 0.913. For the results of the reliability test, all the variables are verified as reliable for usage with (Cronbach's Alpha $\alpha > 0.7$).

FINDINGS AND DISCUSSIONS

This section will discuss about the findings of the paper. The discussion includes the demographic profile, overall mean score and the mean score for different demographic attributes.

Demographic profile

Table 2
Frequencies for gender and course

| Course | Gender | | Total |
|----------|--------|--------|-------|
| | Male | Female | |
| POM | 10 | 23 | 33 |
| MOT | 9 | 25 | 34 |
| LOGTRANS | 9 | 24 | 33 |
| Total | 28 | 72 | 100 |

Table 2 above shows the demographic frequencies for Gender and Course which includes POM, MOT, and LOGTRANS. From the table, male respondents have a total of 28 out of 100 and female students have a total of 72 out of 100, which can reflect in 28% male respondents and 72% female respondents participating in this study. Among the 3 courses, POM have 33 respondents, MOT with 34 respondents and LOGTRANS having 33 respondents which reflects in 33%, 34% and 33% in respondent percentage respectively.

Level of student satisfaction on DKG 6 Cafeteria's service quality

Table 3
Descriptive mean for service quality's dimensions

| Variables | Mean |
|----------------|--------|
| Assurance | 4.1450 |
| Tangible | 4.0575 |
| Reliability | 4.0325 |
| Responsiveness | 3.9875 |
| Empathy | 3.9400 |

Table 3 shows the mean score for service quality variables which is rated by STML students based on their satisfaction for DKG 6 Cafeteria. According to the table, the levels of student satisfaction on each variable are different. The table shows that there are only three variables that is ranked satisfied by STML students which are Assurance, Tangible, and Reliability with mean scores of 4.1450, 4.0575, and 4.0325 respectively. However, the other two variables which are Responsiveness and Empathy are slightly satisfied by STML students, which obtained mean scores of 3.9875 and 3.9400. The result shows that STML students are most satisfied with Assurance aspect provided by cafeteria which obtained the highest mean score among the five variables. The variables are followed by Tangible, Reliability and Responsiveness. The Empathy obtained the least mean score of 3.9400 which explains that students are the least satisfied by this dimension provided by the cafeteria. Assurance has the highest rating because DKG 6 cafeteria is able to inspire STML students' trust and confidence when they are having their meals in the cafeteria. Empathy obtained the least rating may be explained by which students are not satisfied with the cafeteria due to they not receiving enough attention and concern from the cafeteria. Based on the results above, there are three variables ranked satisfy by students and two variables slightly satisfied by students. Hence, the hypothesis H₁: The level of student satisfaction on DKG 6 cafeteria's service quality is in moderate level is rejected and concludes that students are in a satisfied level.

Table 4
Mean score by program

| Variable | Male | | | Overall | Female | | | Overall |
|----------------|--------|--------|--------|---------|--------|--------|--------|---------|
| | POM | MOT | LOG | | POM | MOT | LOG | |
| Tangible | 3.9750 | 4.1944 | 4.3056 | 4.1518 | 3.9022 | 4.0400 | 4.1146 | 4.0208 |
| Reliability | 3.7500 | 4.3611 | 4.2500 | 4.1071 | 3.8261 | 4.0500 | 4.1250 | 4.0035 |
| Responsiveness | 3.8750 | 4.2778 | 4.4722 | 4.1964 | 3.8696 | 3.9800 | 3.8646 | 3.9063 |
| Assurance | 3.9750 | 4.3333 | 4.4444 | 4.2411 | 3.9565 | 4.1700 | 4.1875 | 4.1076 |
| Empathy | 3.6750 | 4.0000 | 4.0833 | 3.9107 | 4.0109 | 3.9100 | 3.9375 | 3.9514 |
| Overall | 3.8500 | 4.2332 | 4.3111 | 4.1214 | 3.9131 | 4.0300 | 4.0458 | 3.9979 |

Comparison in POM

In category of male students, the results show that the students are slightly satisfied with all five variables as the mean score are located between the ranges from 3.5 to 3.99. There are two highest rating variables out of five which are Tangibles and Assurance with the same mean score of 3.9750. This reflects that male students are more satisfied on these two variables provided by DKG 6 cafeteria and they are

satisfied with the physical equipment and facility appearances such as the environment, the availability of equipment and they also have trust inspired by the cafeteria. The ranked variables are followed by Responsiveness and Reliability with mean scores of 3.8750 and 3.7500 respectively. However, the Empathy obtained the lowest mean score which is 3.6750 and this means that the male students are the least satisfied in this variable.

In female category, the results show that Empathy had satisfied the students with means score 4.0109. Female students are slightly satisfied for the rest of variables which are Assurance, Tangible, Responsiveness, and Reliability with respective mean scores of 3.9565, 3.9022, 3.8696, and 3.8261. Among the categories, the most satisfied variable is Empathy because it obtained the highest mean score. It reflects that female students are satisfied when cafeterias are able to pay attention and give care to them in order to understand what they actually need from the cafeteria. The second, third, and fourth ranked variables are Assurance, Tangible, Responsiveness, and the last is Reliability due to it having the lowest mean score.

In a nutshell, female students had a higher rate which is 3.9131 and male students with 3.8500, which reflects that female students have a slightly more satisfaction score on service quality provided by DKG 6 cafeteria than male students in POM.

Comparison in MOT

For the MOT's male students, the variable with greatest satisfaction level is Reliability which has the highest mean score of 4.3611. This reflects that they are satisfied on the aspect of cafeteria being able to deliver the promised service accurately and dependably. The ranks followed ascendingly with Assurance, Responsiveness and Tangible with mean values of 4.3333, 4.2778, and 4.1944 respectively. Empathy had the lowest student satisfaction reflected by the lowest mean score of 4.000. The result tells that, for this category students are satisfied with all service quality aspects provided by the cafeteria in which the mean scores for all variables are also 4.000 and above.

On the other hand, for MOT female students, they are the most satisfied with Assurance because the cafeteria is able to inspire their trust and confidence when they have their meals in the cafeteria which is reflected by the highest mean score of 4.1700 among the variables. Next, the rank is followed by Reliability, Tangible and Responsiveness aspect with the mean scores of 4.0500, 4.0400, and 3.9800 respectively. However, Empathy had the lowest student satisfaction which is reflected by the lowest mean score of 3.9100. The result tells that MOT female students are satisfied with Assurance, Reliability and Tangible and slightly satisfied with Responsiveness and Empathy with the mean scores in range of 3.9100 to 4.1700.

Overall, the comparison of both male and female students in MOT, the service quality provided by the cafeteria had a higher satisfaction level on male students' satisfaction because the mean score for male students is higher than female's which is 4.2332 versus 4.0300.

Comparison in LOGTRANS

Moving on to LOGTRANS male students' category, all variables are also in satisfied level due to the mean scores for all the variables in this category obtaining more than

4.000. Responsiveness and Assurance had a homogeneous mean score which are 4.4722 and 4.4444 respectively. However, the most satisfied variable by the students is Responsiveness and second satisfied is Assurance due to the slight difference of the mean score between these two variables. The variables of Tangible and Reliability with mean scores of 4.3056 and 4.2500 respectively were ranked after Assurance. The variable with least student satisfaction is Empathy with a mean score obtained of 4.0833 which is the lowest student satisfaction among the five variables. The Responsiveness having the highest rate can reflect that LOGTRANS male students are satisfied with the willingness and quickness of help from the cafeteria's staff. However, for LOGTRANS female students, only three variables that they are satisfied with, which are Assurance, Reliability and Tangible. These three variables are also represented by homogeneous mean scores with values of 4.1875, 4.1250, and 4.1146 respectively. Students are slightly satisfied with the remaining variables which are Empathy and Responsiveness with a mean score of 3.9375 and 3.8646 respectively. The ranking for the variables in this category are Assurance, Reliability, Tangible, Empathy and Responsiveness sorted by their mean values in descending order. The LOGTRANS female students are most satisfied with the cafeteria's ability to inspire their trust reflected by the Assurance is the variables that obtained the highest mean score.

In overall, the mean score of LOGTRANS male student is 4.3111 and female student is 4.0458. The difference of the mean score between these two groups can reflect that the male students had more satisfaction with DKG 6 cafeteria's service quality if compared with female students.

Comparison between male and female

The results show that there are 4 variables that the male students are more satisfied compared with female students which are Tangible, Reliability, Responsiveness, and Assurance. The respective pairs of mean scores comparison between male and female are 4.1518 vs 4.0208 for Tangible, 4.1071 vs 4.0035 for Reliability, 4.1964 vs 3.9063 for Responsiveness, and 4.2411 vs 4.1076 for Assurance. In contrast, female students are more satisfied than male in Empathy where the pair of mean scores are 3.9514 vs 3.9107. For male students, they are satisfied with Tangible, Reliability, Responsiveness, and Assurance and slightly satisfied with Empathy provided by the cafeteria. For female students, they are satisfied with Tangible, Reliability and Assurance and slightly satisfied with Responsiveness and Empathy. In overall, male student are more satisfied on DKG 6 cafeteria's service quality than female with mean score of 4.1214 vs 3.9979.

Table 5
Variables' mean Score for STML student

| Variables | Course | | |
|----------------|--------|--------|----------|
| | POM | MOT | LOGTRANS |
| Tangible | 3.9242 | 4.0809 | 4.1667 |
| Reliability | 3.8030 | 4.1324 | 4.1591 |
| Responsiveness | 3.8712 | 4.0588 | 4.0303 |
| Assurance | 3.9621 | 4.2132 | 4.2576 |
| Empathy | 3.9091 | 3.9338 | 3.9773 |
| Overall | 3.8939 | 4.0838 | 4.1182 |

Comparison between POM, MOT and LOGTRANS

Table 5 shows the mean score for STML student in three difference courses which are POM, MOT and LOGTRANS. For POM students, they are slightly satisfied with all variables due to the mean scores obtained homogeneously. Assurance is variable that the students are most satisfied with at a mean score of 3.9621 and the rankings are followed by Tangible, Empathy, Responsiveness and the last is Reliability with mean scores of 3.9242, 3.9091, 3.8712, and 3.8030 respectively. However, for MOT students, they are satisfied with four variables which are Tangible, Reliability, Responsiveness, and Assurance which obtained mean scores of 4.0809, 4.1324, 4.0588, and 4.2132 respectively. The Empathy variable obtained the least mean score of 3.9338. The ranking for the variables in MOT course are Assurance, Reliability, Tangible, Responsiveness, and Empathy according to the descending order of mean scores obtained. In LOGTRANS, the students are also satisfied with Tangible, Reliability, Responsiveness, and Assurance and slightly satisfied with Empathy and it is the same as MOT students. The variables are ranked as Assurance, Tangible, Reliability, Responsiveness, and Empathy with mean score obtained of 4.2576, 4.1667, 4.1591, 4.0303, and 3.9773 respectively. The overall results reflect that, POM students are slightly satisfied with the service quality provided by DKG 6 cafeteria, MOT students and LOGTRANS students are satisfied with the service quality provided by DKG 6 cafeteria with overall mean scores of 3.8939, 4.0838, and 4.1182 respectively. In conclusion, the hypothesis 2, H₂: There are different levels of satisfaction between male and female students on DKG 6 cafeteria's service quality is accepted due to the ability to prove the existence of different satisfaction levels among the demographic attributes which are the course and also gender by the several findings above.

CONCLUSION

According to this research, the findings show that the student satisfaction is in a satisfied level for the service quality provided by DKG 6 cafeteria but not in the peak condition. So, the service quality can still be improved until the students' satisfaction reach maximum level. As the results shown in the mean score analysis, there are different levels of student satisfaction on DKG 6 cafeteria's service quality in different demographic attributes. Hence, the DKG 6 cafeteria should take respective improvement and correction actions against each variable for each demographic category in order to sustain student loyalty and return rate by satisfying their needs and wants by providing the highest degree of service quality possible.

Furthermore, all of the research questions and objectives had been answered and achieved where all hypotheses are successfully tested. For hypothesis 1, The level of student satisfaction on DKG 6 cafeteria's service quality is in moderate level is rejected due to the mean score value for three variables are more than 4.00 and two variables more than 3.9 which reflects that slightly satisfied so the student satisfaction level can't be in moderate level. However, hypothesis 2, H₂: There are different levels of satisfaction between male and female students on DKG 6 cafeteria's service quality is verified as accepted through the result of mean score comparison between STML students in the gender categories which are male and female.

REFERENCES

- Ahmad, A. A. (2015). The Effect of Service and Food Quality on Customer Satisfaction and Hence Customer Retention. *Asian Social Science*, 11(23), 129-130.
- Bekir, B. D., & Halil, D. (2015). Differences in Service Quality Perceptions of Stakeholders in the Hotel Industry. *International Journal of Contemporary Hospitality Management*, 27(1), 131.
- Dayang, N. M. A. A., & Rozario, F. (2009). Influence of Service and Product Quality towards Customers Satisfaction: A Case Study at the Staff Cafeteria in the Hotel Industry. *International Journal of Social, Behavioral, Education Economic, Business and Industrial Engineering*, 3(5).
- Ghimire, A. J. (2012). Service Quality and Customer Satisfaction in the Restaurant Business. *Central Ostrobothnia University of Applied Sciences*, 1-2.
- Intan, M. A. R., Muhammad, F. S. A., Bibi, N. M. Y., & Mohd Shahidan, S. (2016). Impact of Service and Food Quality on Customer Satisfaction among Generation Y for the Fat Food Restaurant in Malaysia. *International Journal of Information, Business and Management*, 8(1), 52-53.
- Landrum, H. P., Zhang, X., & Peak, D. (2009). Measuring IS System Service Quality with SERVQUAL. *International Journal of an Emerging Transdiscipline*.
- Liang, X., & Zhang, S. (2009). Investigation of Customer Satisfaction in Student FoodService: An Example of Student Cafeteria in NH. *International Journal of Quality and Service Sciences*, 113-12.
- 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).
- Ramseook, M. P. (2012). Perceived Service Quality in Restaurant Services: Evidence from Mauritius. *International Journal of ManagementT and Marketing Research*.
- Reza, E. S., Daniela , R. (2013). The Antecedents of Consumer Satisfaction and Loyalty in Fast Food Industry. *International Journal of Quality & Reliability Management*, 30(7), 780-798.
- Ryu, K., Lee, H. R., Kim, W. G. (2012). The Influence of the Quality of the Physical Environment, Food, and Service on Restaurant Image, Customer Perceived Value, Customer Satisfaction, and Behavioral Intentions. *International Journal of Contemporary Hospitality Management*, 24(2), 201-202.
- Yarimoglu, E. K. (2014). A Review on Dimensions of Service Quality Models. *Journal of Marketing Management*, 79-93.