Students Satisfaction Towards Cafeteria in University Campus – A Case Study

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Abstract

Food industry plays a crucial role as one of the critical sectors in every country. A cafeteria is a part of food industry which serves foods and drinks to customers in return for money. Customer satisfaction is a measurement of service or product supplied by a cafeteria whether it unmeet, meet, or surpass customer satisfaction. As cafeterias in campus are the main service provider for students that resides inside a university it is necessary to regularly maintain their quality as to ensure that the food consumed is of good quality, nutritious, and hygienic. Dissatisfaction towards cafeteria services will leads the students to refuse having their meals inside campus. There are 378 respondents participated in this study. Structural equation modelling technique was used to identify the factors which significantly affect students' satisfaction toward one of the cafeterias in College AA and the relationship among the factors were determined and their impact on students' satisfaction was investigated. There are two factors that show a significant positive influence towards students' satisfaction which are service quality and varieties of menu. Among these two, service quality shows the most influence effect on students' satisfaction. Therefore, this study suggested that the college/university cafeteria should put more effort on the service quality that they provided to the students.

Keywords: Customer satisfaction, Structural Equation Modelling, Zero hunger

1. Introduction

Food acts as a crucial role as a source of sustenance in every living being, human included. It is deemed as one of the critical sectors in every country. The food industry itself is a lucrative business, with its jurisdiction covers the supply of food, production process, harvesting operation, processing

management, packaging, transportation, distribution process, consumption of the items, and end with disposal (Sadiku et al., 2019). Inside the university, the dependency on food supply through food provider is very high, thus the quality of food and matched expectation toward food provider should not be taken lightly. Normally, these food providers can be in a form of kiosk, small café, take out delivery, and a large percentage of this service comes from cafeteria that are operated inside the campus.

A cafeteria is a restaurant which its role is to serve foods and beverages to customers in return for monetary transaction, either paid before or after the meal. While customer satisfaction is a measurement of service or product supplied by a cafeteria whether it unmeet, meet, or surpass customer satisfaction. According to Ryu (2010), facilities of a cafeteria, noteworthy food and acceptance level for service quality influence customer satisfaction especially in restaurant/cafeteria industry. This study is consistent with more recent study such as in Karki and Panthi (2018), Tuncer et *al.* (2020), Uslu and Eren (2020), and Mensah *et al.* (2021). As cafeteria in campus are the main service provider for students that resides inside campus, it is necessary to regularly maintain their quality as to ensure that the food consumed are of good quality, nutritious, and hygienic.

Early study by Xi and Shuai (2009) show much favor is given by students towards higher variety types of food. While Abdullah *et al.* (2012) pointed out that most of the students have high expectation towards the food quality with reasonable price. Cha and Seo (2019) found that some attributes i.e., menu, taste, price, and cleanliness contribute significantly towards student's satisfaction in universities' cafeteria. Similar sentiments are found in the study conducted by Smith *et al.* (2020) in which they found that food quality, ambience of the place, value for money, options for food and drinks, and quality of service are critical to obtain favorable satisfaction among students in campus. In addition, quality of foods, service quality, physical environment and perceived price also influence the level of customer satisfaction. Violation to the food quality, service quality and price, to name a few, will lead to dissatisfaction of the students to have their meals inside campus.

Yüksel and Yüksel (2003) found out the sequences of factors that effect on dining satisfaction are service quality, product quality, hygiene, menu diversity, price and convenience. There are three factors that are going to use in this research which are variety of menu, physical environment (PE) and service quality.

Food quality gives a quality characteristic of foods such as texture, taste that can be acceptable by consumers. In the United States, food quality is being enforced by the Food Safety Act 1990. Moreover, Law *et al.* (2004) pointed out that waiting time and other factors such as environment, seats availability and foods quality are all significantly influence customer satisfaction. Food quality, service quality,

location of the restaurant/cafeteria and waiting time leads to customer satisfaction (Ryu *et al.,* 2012). Cafeteria image is significantly affected by these factors. Food quality and quality of environment affect the customer perceived value, yet customer satisfaction also been influenced (Ryu *et al.,* 2012).

Environmental factor also plays an important role towards customer satisfaction. Ambience is a feeling or mood based on a particular place. Based on classical research from Darley and Gilbert (1985), physical environment influences customer satisfaction. Similarly, this factor is still applicable today, both social and physical environment give a conclusive signal on customer satisfaction, which also affect their intentional behaviours (Chris and Liang, 2011; Özdemir-güzel and Dinçer, 2018; Zhong and Moon, 2020). Besides, the physical environment not only brings out the emotional responses (for example, customer satisfaction) yet it tends to be cognitive or perceptual responses (e.g. service quality) and affect how consumer evaluate and judge the location quality and product or service (Han and Ryu, 2009; Ryu and Jang, 2007; Kim and Moon, 2009).

According to Klassen *et al.* (2005), the most important criterion that affects the satisfaction of customer is price. The reasonable price as moderator of quality of food and environment can increase or enhance customer satisfaction (Han and Ryu, 2010; Abdullah *et al.,* 2018; Lathifah *et al.,* 2021). Furthermore, based on Hanif *et al.* (2010), the price offered with fair and fixed has great impact towards customer satisfaction; and it made sense of satisfaction among customer if the price provided is compatible and fair in increase in price.

We narrow this study into one residential college inside campus, which will be recalled as College AA that located in a campus situated near the bordering of Malaysia-Thailand. Most of the students prefer to take their meal outside of the campus which in return affected sales of cafeteria in College AA. One of the reasons of this situation is because of the students feel that the outside cafeteria able to provide them with many choices of food with good service quality. Abdullah *et al.* (2012) pointed out students asking friends to dine out of campus or buy outside food outlets for them as alternative ways to fulfill their needs. Generally, students tend to have their meal in cafeteria, as it is very convenience. But year by year, most of the students now prefer to go out of the campus to have their meal even though they need to spend more time and expenses to get to their destination. This situation has caused the decreasing number of students who eat in cafeteria.

The objective of this research is to identify the factors which significantly affect students' satisfaction toward one of cafeteria in College AA and to determine the relationship among the factors and their impact on students' satisfaction.

In this study, we only focus on Cengkeh Cafeteria which is due to its strategic location. Basically, we are going to investigate four possible factors to explain the level of students' satisfaction towards the cafeteria. Such study can offer viewpoint for management to improve cafeteria's quality or services in College AA, understand the relationship among these factors and how they affect students' satisfaction.

Based on the literature review, there is a total of six hypotheses to be tested:

H1: Quality of food has a positive influence towards customer satisfaction.

H2: Service quality has a significance effect towards customer satisfaction.

H3: Physical environment quality has a positive influence on customer satisfaction.

H4: Perceived price has a significant influence on the relationship between food quality and customer satisfaction.

H5: Perceived price has a significant influence on the relationship between service quality and customer satisfaction.

H6: Perceived price has a significant influence on the relationship between physical environment quality and customer satisfaction.

2. Materials and Methods

2.1 Data Selection

Basically, we are interested in students' satisfaction towards Cengkeh Cafeteria. The selection of this cafeteria was based on the popularity of this cafeteria. In addition, this cafeteria usually has a lot of customers daily as compared to the other cafeteria in College AA. All College AA students were our target population regardless of their educational level and gender. Furthermore, there are 3 faculties in College AA which are Faculty X, Faculty Y, and Faculty Z. The population of this study is around 20,000 students. According to Sekaran and Bougie (2010), a sample of 378 respondents is suggested to be selected from the population with confidence level 95%.

College AA consists of 15 student residential halls (DPP) in 4 different routes, which are Route A, Route B, Route C and Route D. Firstly, a simple random sampling (SRS) method was used to select one DPP from each route. From the result, MAS in Route A, MISC in Route B, YAB in Route C and Bank Rakyat in Route D were selected. Secondly, SRS method was used again to choose only one block from each selected DPP. Block D in MAS, Block A in MISC, Block D in YAB and Block G in Bank Rakyat has been selected.

Next, systematic sampling method was used to decide room to be selected and the questionnaire was distributed to the selected respondents. Since there are 4 blocks being selected therefore, we equally divided 100 questionnaires to each. For example, there is a total of 132 residents which 66 rooms in

each block with 2 residents in each room. In this case, k = (population size / sample size) where 132 / 100 = 1.32. Hence, we distributed the questionnaires starting from the first room and continue after every 2 rooms. The reason we set a target of 100 respondents from each block is that we want to have a total of 400 answered questionnaires so that the extra questionnaires can be kept as a backup for any missing, incomplete-answered questionnaires or replace those respondents who never been to Cengkeh Cafeteria.

2.2 Questionnaire Design

The questionnaire was modified from article by Xi and Shuai (2009) which consist of two parts. The first part is about Demographic Information with gender (male, female), semester, hall (X, Y, Z), and race (Malay, Chinese, Indian and others). The second part consists of 3 questions related to satisfaction toward Cengkeh Cafeteria. The first two questions are "have you been to Cengkeh Cafeteria" and "how often do you use Cengkeh Cafeteria service" while the last question asking about "how happy are you with Cengkeh Cafeteria". The responses are using a 7-point Semantic scale from strongly disagree (1) to strongly agree (7).

2.2 Reliability Test

Reliability test is used to measure the degree of consistency and stability for the intended items (Colin and Julie, 2005). Internal Reliability and Cronbach's alpha coefficient of ≥ 0.7 represents confirmation in satisfactory level. Construct reliability (CR) reflects the measure of both internal consistency and reliability of the measured variables that representing a latent construct. A value of CR ≥ 0.6 is required. Average Variance Extracted (AVE) ≥ 0.5 is also required as it is the explained average percentage of the items in a construct.

Pilot test was conducted to ensure that the questions designed are reliable. A sample of 30 respondents is randomly selected to answer the questionnaire. Questions that are not providing useful data are discarded and the final version of questionnaire are made. By referring to Table 1, the Cronbach's Alpha value from the pilot test is 0.884 (≥ 0.7, confirm satisfactory). It shows that the internal consistency reliability is considered to be acceptable and the measurement instrument is reliable. The questionnaires are trustworthy to be distributed to the respondents.

Table 1. Reliability Cronbach's alpha

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	*N* of Items
.884	.886	27

2.3 Validity Test

Construct Validity is achieved should the requirements are fulfilled: "GFI ≥ 0.90, CFI ≥ 0.90, RMSEA ≤ 0.08, and ratio of Chisq / df < 5.0". Lastly, Discriminant Validity is achieved should the measurement model is free from redundant items. AMOS identifies the paired of redundant items and reported in the MI (Modification Indices). Researcher can choose to delete one of the selected items and do model re-specification or set the correlated pair as "free parameter estimates".

2.4 Factor Analysis

Factor analysis is also used to describe possible variability among observed variables. The correlated variables in terms of a potentially lower number of unobserved variables called factors. Based on our literature, we are able to come out with 4 factors that affect students' satisfaction towards Cengkeh Cafeteria. In order to support our assumption, we conduct factor analysis, which take all the variables and explain or group them under factors according to their correlation with one another.

2.5 Structural Equation Modelling

The structural equation modelling (SEM) was used to construct the relationship between factors. SEM is a type of multivariate analysis which investigates multiple relationships between several dependent and independent variables. It is also a most efficient estimation technique for a series of separate multiple regressions simultaneously. The major assumptions associated with structural equation modeling include: multivariate normality, no systematic missing data, sufficiently large sample size, and correct model specification.

3. Results and Discussion

A total of 378 respondents completed the questionnaire in the study (refer Table 2). 25.4% of respondents are males and 74.5% are females. There are four races, which are Malay (62.9%), Chinese (26.2%), India (6.5%) and other (4.4%). Most of the respondents from Faculty X (40.3%), followed by Faculty Y (32.7%) and Faculty Z (27.0%). Most of them are semester 4 (37.1%) and few of them are semester 8 (0.5%). Based on the finding, most of the respondents use Cengkeh Cafeteria services with "2 to 3 times per week" (33.1%), followed by "Few times per month" (23.8%), "Few times per semester" (18.3%), "Daily" (12.7%) and "Only once or few times over" (12.2%).

Table 2. List of items

No.	Questions
Item 1	An adequate number of food choices is available.

Item 2	The choices of foods available allow me to meet my cultural and ethnic preferences.
Item 3	The appearance of the food is good.
Item 4	The taste/flavor of the food is good.
Item 5	Foods are always the same quality.
Item 6	I am pleased with the foods offered.
Item 7	Prices are reasonable for the portions served.
Item 8	I consider the food's prices as acceptable.
Item 9	I am pleased with what I get and what I pay.
Item 10	I often compare the price with another cafeteria.
Item 11	The price of food is written clearly on the menu.
Item 12	The charges are based on the prices on menu.
Item 13	Physical Environment.
Item 14	I always have a place to sit.
Item 15	I like the decorations in the cafeteria.
Item 16	The seats are comfortable.
Item 17	Noise level is acceptable.
Item 18	Cleanliness is good.
Item 19	I am pleased with the ambience (eg. feeling, mood) of the cafeteria.
Item 20	The staffs are clean and neat.
Item 21	The staffs are friendly.
Item 22	I feel easy to talk with staff when I'm served.
Item 23	The staff smile and greet me when I'm served.
Item 24	The serving line moves fast.
Item 25	I am pleased with the staff of the cafeteria.
Item 26	I am pleased with the Cengkeh Cafeteria overall.

3.1 Keiser Meyer-Olkin (KMO) and Bartlett Test

The KMO measures the sampling adequacy that should be greater than 0.5 for a satisfactory factor analysis to proceed. By looking at Table 3, the KMO measure is 0.937. Also, from Table 3, Bartlett's test of sphericity is significant. We can see that the significant value is much lower than 0.05, concluding that the correlation matrix is not an identity matrix and factor analysis model is appropriate for this data.

Table 3. KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.937
Bartlett's Test of Sphericity	Approx. Chi-Square	5.760E3
	df	190
	Sig.	.000

3.2 Total Variance Explained

Table 4 illustrates all extractable factors (with respective eigenvalue), the percent of variance

attributable to each factor, and the cumulative variance of the factor and the previous factors. We can see that Factor 1 accounts for 51.984% of the variance, Factor 2 (11.343%) and Factor 3 (6.676%). All remaining factors are not significant.

Basically, after we constructed the factor analysis, we found that our factor has changed from 4 factors to 3 factors only. Therefore, we have renamed the new factors, which are menu, physical environment and service quality.

Table 4. Loading value and percentage of variance explained by each factor

Factor	Eigen value	Percentage of Explained Variances
Factor 1 (Menu, FQ)	9.357	51.984
Factor 2 (Physical Environment, PE)	2.042	11.343
Factor 3 (Service Quality, SQ)	1.202	6.676

3.3 Rotated Component (Factor) Matrix

Rotation can reduce the number factors for variables that have high loadings. Rotation does not change anything, rather enable analysis to be interpreted easier. Referring to Table 5 (with absolute value below 0.5), we can see that PE1, PE2, PE3, PE4 and PE5 are substantially loaded on Factor 2, while variables SQ1, SQ2, SQ3, SQ4 and SQ5 are substantially loaded on Factor 3 and the rest are loaded on Factor 1. These factors can be used as variables for further analysis.

Table 5. Rotated component matrix

	Component		
	1	2	3
FQ1	.757		
FQ2	.708		
FQ3	.780		
FQ4	.789		
FQ5	.705		
P1	.718		
P2	.786		
P4	.555		
P5	.657		
P6	.711		
PE1		.719	

PE2		.768	
PE3		.803	
PE4		.791	
PE5		.700	
SQ1			.570
SQ2			.802
SQ3			.811
SQ4			.802
SQ5			.746

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

3.4 Structural Equation Modelling

Table 6 shows the model fit assessment for hypothesis model. From this table we can see that our model is not fit for all the assumptions.

Table 6. Model fit assessment for hypothesis model

Fit Indices	Fit Statistics	Recommended Fit Criteria	Conclusion
Absolute Fit Indices			
CMIN	0.000	P > 0.05	Not fit
RMSEA	0.116	Range 0.05 to 1.00 acceptable	Not fit
GFI	0.744	GFI > 0.90	Not fit
Incremental Fit Indices			
CFI	0.839	Over 0.90	Not fit
Parsimony Fit Index			
CMIN/DF (Ratio)	6.076	Below 5	Not fit

The initial model (Figure 1) with 24 items was loaded into four domains and the final model (Figure 2) with 22 items which exhibited a good fit model (Table 7). All the criteria of model fit assessment have been met by the final model which leads to a best fit model.

By referring Table 8, we can say that two out of three of our hypotheses are significant in the study. There are:

H_1: Food quality has a positive influence towards customer satisfaction.

H_2: Service quality has a significance effect towards customer satisfaction.

H_3: Perceived price has a significant influence on the relationship between quality of food and customer satisfaction.

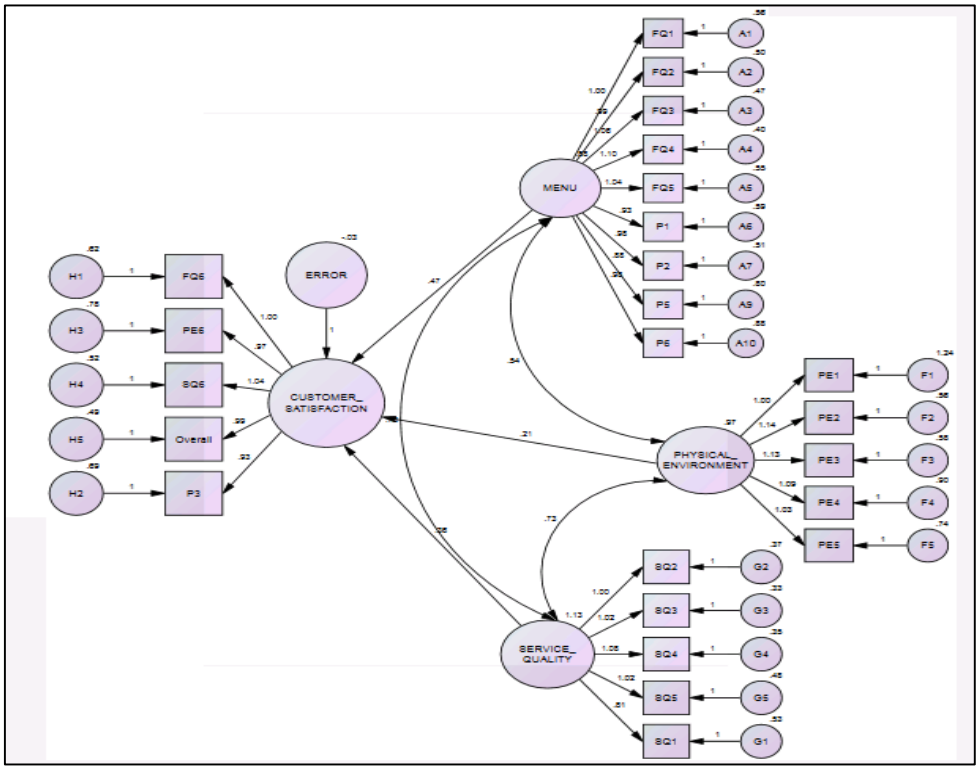

Figure 1. Hypothesis model

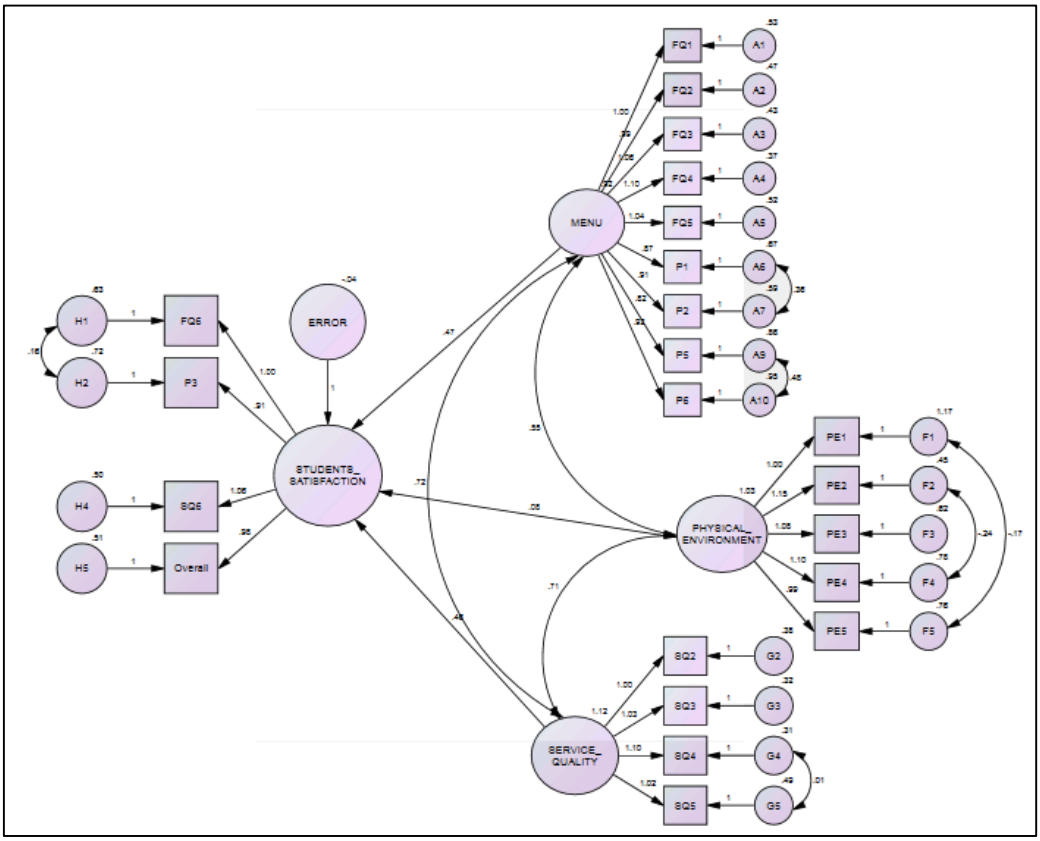

Figure 2. Final model

Table 7. Model fit assessment for final model

Fit Indices	Fit Statistics	Recommended Fit Criteria	Conclusion
Absolute Fit Indices			
CMIN	0.000	P > 0.05	Not fit
RMSEA	0.092	"Range 0.05 to 1.00 acceptable"	Fit
GFI	0.838	GFI > 0.90	Not fit
Incremental Fit Indices			
CFI	0.910	Over 0.90	Fit
"Parsimony Fit Index"			
CMIN/DF (Ratio)	4.153	Below 5	Fit

Table 8. Regression weights

			Estimate	S.E.	C.R.	P
Students Satisfaction	<---	Menu	.466	.061	7.636	***
Students Satisfaction	<---	Physical Environment	.078	.031	2.539	.011
Students Satisfaction	<---	Service Quality	.460	.045	10.215	***

****p*-value<0.001

Table 9. Standardized regression weights

			Estimate
Students Satisfaction	<---	Menu	.497
Students Satisfaction	<---	Physical__Environment	.088
Students Satisfaction	<---	Service__Quality	.543

The importance of each factor affecting the other has been tabulated in a Table 9. Based on the SEM result as Table 9, we developed an equation to represent the relationship between factors. The equation is

Students satisfaction = 0.497 (menu) + 0.088 (physical environment) + 0.543 (service quality)

We can say that only two factors show a positive satisfaction towards Cengkeh Cafeteria in College AA. Service quality has the highest regression weight, which is 0.543. Hence, we can say that service quality factor gives the most contribution towards students' satisfaction in Cengkeh Cafeteria. Then, menu ranked at the second with the estimates of 0.497 followed by physical environment, which is 0.088. In other words, we can say that physical environment factor has the lowest influence or almost no contribution towards students' satisfaction in Cengkeh Cafeteria. Although physical environment factor is not significant towards students' satisfaction, but there is still relationship with other factors.

According to Dancey and Reidy (2004), value of correlation coefficient from 0.4 to 0.6 and that from

0.7 to 0.9 consider as moderate and strong relationship respectively. Thus, physical environment has moderate positive relationship to both menu (r = 0.569) and service quality (r = 0.658) while there is a strong positive relationship between menu and service quality (r = 0.715) as shown in Table 10.

Table 10. Correlation between factors

			Estimate
Service Quality	<-->	Menu	.715
Physical Environment	<-->	Service Quality	.658
Physical Environment	<-->	Menu	.569

4. Conclusion

The final model, which consists of four constructs with 22 items, exhibits a good fit model (RMSEA = 0.092, CFI = 0.910, CMIN / DF (Ratio) = 4.153). Composite Reliability and Average Variance Extracted of the domains ranged from 0.848 to 0.928 and 0.500 to 0.762 respectively. Internal consistency reliability ranged from 0.848 to 0.931. This study concludes that the two significant factors was acceptable to be used to measure satisfaction of College AA students towards Cengkeh Cafeteria.

In a nutshell, we can see that there are two factors (service quality and menu) show a significant positive influence towards students' satisfaction in Cengkeh Cafeteria. From this research study, we found that service quality has the most influence on students' satisfaction. Therefore, this finding suggested that Cengkeh Cafeteria should put more effort on the service quality they provided.

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6. References

Abdullah, S., Mansor, N. and Naba, M. (2012). Exploring the major determinants of student satisfaction on university. *Interdisciplinary Journal of Research in Business*, 2(7), 62-73.

Abdullah, D., Hamir, N., Nor, N. M., Krishnaswamy, J. and Rostum, A. M. M. (2018). Food quality, service quality, price fairness and restaurant re-patronage intention: The mediating role of customer satisfaction. *International Journal of Academic Research in Business and Social Sciences*, 8(17), 211-226.

Cha, S. S. and Seo, B. K. (2019). Cafeteria use by students and effect of selection attributes on satisfaction. *The Journal of Asian Finance, Economics, and Business*, 6(1), 187-194.

Chris Lin, J.S. & Liang, H.Y. (2011). The influence of service environments on customer emotion and service outcomes. *Managing Service Quality*, 21(4), 350 - 372.

Colin, P. and Julie, W. (2015, June). Exploring reliability in academic assessment. Reliability and Validity. Retrieved 15 May 2014, from http://www.uni.edu/chfasoa/reliabilityandvalidity.htm

Dancey, C. and Reidy, J. (2004). *Statistics without Maths for Psychology: using SPSS for Windows*. Prentice Hall, London.

Darley, J. M. and Gilbert, D. T. (1985). Social psychological aspects of environmental psychology. In Gardner, L. and Aronson, E. (Eds), *Handbook of Social Psychology*. New York: Random House, 949 - 992.

Han, H. S. and Ryu, K. (2009). The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the family restaurant industry. *Journal of Hospitality & Tourism Research*, 33(4), 487 - 510.

Han, H. S. and Ryu, K (2010). Influence of the quality of food, service, and physical environment on customer satisfaction and behavioral intention in quick-casual restaurants: Moderating role of perceived price. *Journal of Hospitality & Tourism Research*, 34(3), 310 - 329.

Hanif, M., Hafeez, S. and Riaz, A. (2010). Factors affecting customer satisfaction. *International Research Journal of Finance and Economics*, 60, 44 - 52.

Karki, D. and Panthi, A. (2018). *How food quality, price, ambiance and service quality effects customer satisfaction: A study on Nepalese restaurants in Finland*, Bachelor's Thesis, Haaga-Helia University of Applied Sciences.

Kim, W. G., Moon, Y. J. (2009). Customers' cognitive, emotional, and actionable response to the s ervice scape: A test of the moderating effect of the restaurant type. *International Journal of Hospitality Management*, 28(1), 144 - 156.

Klassen, K. J., Trybus, E. and Kumar, A. (2005). Planning food services for a campus setting. *International Journal of Hospitality Management*, 24(4), 579 – 609.

Lathifah, N., Lasise, S. and Ismail, M. (2021). Analysis of the effect of service quality and price on loyalty through customer satisfaction in padang restaurant in makassar. *Hasanuddin Journal of Applied Business and Entrepreneurship*, 4(2), 57 - 71.

Law, A. K. Y., Hui, Y. V. and Zhao, X. (2004). Modeling repurchase frequency and customer satisfaction for fast food outlets. *International Journal of Quality & Reliability Management*, 21(5), 545 - 563.

Mensah, B. A., Achio, S. and 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.

Özdemir-güzel, S. and Dinçer, M. Z. (2018). The effect of restaurant's physical environment on perceived value, customer satisfaction and loyalty: Case of Istanbul. *Journal of Tourism and Gastronomy Studies*, 6(4), 626 - 643.

Ryu, K. and Jang, S. (2007). The effect of environmental perceptions on behavioral intentions through

emotions: The case of upscale restaurants. *Journal of Hospitality & Tourism Research*, 31(1), 56 - 72.

Ryu, K. and Han, H. (2010). Influence of the quality of food, service, and physical environment on customer satisfaction in quick-casual restaurants: Moderating role of perceived price. *Journal of Hospitality & Tourism Research*, 34(3), 310 - 329.

Ryu, K., Lee, H. R. and 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), 200 - 223.

Sadiku, M. N., Musa, S. M. and Ashaolu, T. J. (2019). Food industry: An introduction. *International Journal of Trend in Scientific Research and Development*, 3(4), 128 - 30.

Sekaran, U. and Bougie, R. (2010). *Research Methods for Business: A Skill Building Approach*, 5th ed. Chichester, John Wiley & Sons Ltd.

Smith, R. A., White-McNeil, A. and Ali, F. (2020). Students' perceptions and behavior toward on campus food service operations. *International Hospitality Review*. 34(1), 13 - 28.

Suhartanto, D., Helmi Ali, M., Tan, K. H., Sjahroeddin, F. and Kusdibyo, L. (2019). Loyalty toward online food delivery service: the role of e-service quality and food quality. *Journal of Foodservice Business Research*, 22(1), 81 - 97.

Tuncer, İ., Unusan, C. and Cobanoglu, C. (2020). Service quality, perceived value and customer satisfaction on behavioral intention in restaurants: An integrated structural model. *Journal of Quality Assurance in Hospitality & Tourism*, 22(4), 447 - 475.

Uslu, A. and Eren, R. (2020). Critical review of service quality scales with a focus on customer satisfaction and loyalty in restaurants. *Deturope-the Central European Journal of Regional Development and Tourism,* 12(1), 64 - 84.

Xi, L. and Shuai, Z. (2009). Investigation of customer satisfaction in student food service – An example of student cafeteria in NHH. *International Journal of Quality and Service Sciences*, 1(1), 113 - 124.

Yüksel, A. and Yüksel, F. (2003). Measurement of tourist satisfaction with restaurant services: A segment-based approach. *Journal of Vacation Marketing*, 9(1), 52 - 68.

Zhong, Y. and Moon, H. C. (2020). What drives customer satisfaction, loyalty, and happiness in fast-food restaurants in China? Perceived price, service quality, food quality, physical environment quality, and the moderating role of gender. *Foods*, 9(4), 460.