
The Effect of Hygiene and Sanitation on Customer Satisfaction in the Canteen of Trisakti Institute of Tourism, Jakarta

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Abstract. Canteen is a place in school or college that is used by the whole community at school to recess and eat their food. The person who in charge of managing the canteen should pay attention to the hygiene and sanitation and the food handlers in there. This study aims is to determine the influence of hygiene and sanitation on customer satisfaction in the canteen of Trisakti Institute of Tourism. The type of research is descriptive quantitative with questionnaire method and looking for influence between hygiene and sanitation on customer satisfaction. Total of respondents were 100 respondents. This research used SPSS program version 22 as a tool in processing data. From the result of correlation coefficient test equal to 0,388, relationship between hygiene and sanitation with customer satisfaction is low with positive linear relationship. While the result of determination coefficient test shows if the influence of hygiene and sanitation is 15%, the remaining 75% influenced by other variables that are not included in this study.

Keyword: hygiene and sanitation, customer satisfaction, the canteen of Trisakti Institute of Tourism.

Introduction

Hygiene and sanitation in food and drink is an effort to control the factors of place, equipment, people and food which can or may cause health problems and food poisoning (Depkes RI, 2004). Healthy food is food that is not polluted, does not contain microorganisms or bacteria from harmful chemicals, has been processed in the right way so that its nutritional properties and substances are not damaged and disturbing with human health.

The behavior of food handlers plays a role in determining whether a food is healthy or not. The behavior of food handlers can also pose health risks, in the sense that the behavior of unhealthy food handlers will have an impact on the hygiene of the food served. Conversely, healthy food handler behavior can prevent food from contamination or contamination and poisoning.

The equipment used to process food is also an important factor, because if the cookware is not clean or has lots of bacteria will directly affect the quality of the food. If the bacteria in the equipment contained the food, then the person who eat will experience food poisoning.

Trisakti Institute of Tourism is one of the university in Jakarta that provides knowledge about the world of tourism to its students. A school must provide the best facilities for its students, one of which is facilitating a canteen. A good canteen is a canteen that is clean and can make anyone who eats there the canteen feels comfortable. The cleanliness factor is not only from the canteen environment, but also from the food vendors in the canteen.

Based on the results of temporary observations, some food vendors in the canteen area of the Trisakti Institute of Tourism still pay little attention to hygiene and sanitation in processing and serving food. Therefore, in this study the authors wanted to know the Effect of Hygiene and Sanitation on Food and Beverages on Customer Satisfaction at canteen in Trisakti Institute of Tourism.

Literature Review

Canteen

A canteen is a room or building located at a school or university. Nababan (2012) states that a school canteen is a place at school where all school members can buy snacks, both in the form of ready-to-eat food and processed food. Furthermore, Nuraida et al. (2011) said that the school canteen is a place for snacks for school children besides selling snacks outside school.

Physically, the canteen is usually only a small room that provides food and drinks provided by the canteen staff. As we are aware, the presence of a canteen is very much needed by students. Procurement of a canteen must pay attention to several aspects, including the purpose and function of the canteen, purchasing power, facilities and infrastructure in the canteen and supervision.

The canteen should be an integrated part of the overall faculty program, not seen as a profit maker. On this basis, the campus should be able to provide policies that can benefit both the campus and the canteen manager. With the creation of a canteen at the Trisakti Institute of Tourism, I hope to be able to provide a decent and comfortable place for sellers and students.

Canteen Function

The functions of the canteen according to Nababan (2012) include: Providing services to the entire school community for the needs of a variety of safe, quality and nutritious food and beverages, Supporting student entrepreneurship education from an early age if the process in the canteen attracts students' attention and provides snacks at reasonable prices, Supporting students' ability to learn about food safety and nutrition in class, Teach students to apply hygiene standards in handling, processing and serving food in everyday life.

It can be concluded that healthy canteens have an important role in schools or universities. The canteen is a means of providing healthy, safe and nutritious food and also providing services to residents of schools or tertiary institutions regarding the need for a variety of safe, quality and nutritious food and drinks.

Healthy Canteen Criteria

School canteens must be able to provide healthy, safe and nutritious food for all members of the school or tertiary institution. According to Minarto (2011) canteen managers should pay attention to the following aspects, including: Power, Healthy canteen staff should have qualifications including being able-bodied, free from infectious diseases, clean, tidy, understanding about health, and having high work discipline. Canteen staff should have practical and simple nutritional knowledge so they know good snacks to sell in the school canteen. Funds, Funds are needed in investment. Funds are needed to meet the needs for physical facilities and food. Funds can be sourced entirely from the school, from the parents of the students and the school, from the parents of the students entirely, or outsourced to catering service entrepreneurs. Funds are then obtained and utilized through selling food in the school canteen. Location of the canteen, The location of the canteen must be in the yard as if and as far as possible it is still within the school building area, not adjacent to a bathroom or garbage disposal. Facilities and Equipment, Canteen facilities and equipment include canteen building facilities, clean water facilities, processing rooms, serving areas, food storage areas, canteen equipment, sanitation facilities, waste disposal facilities and others

According to Nuraida (2011) school canteens are grouped into two types, namely canteens with closed rooms and canteens with open spaces such as corridors or open

courtyards. The two canteens must have the following facilities and infrastructure: Building for a healthy canteen. The requirements for the canteen building include a waterproof floor, flat, smooth but not slippery, strong, and tilted so that it is easy to clean. Walls are waterproof, even, smooth, bright in color, durable, not easy to peel off, and strong so they are easy to clean. The ceiling is made of durable materials, does not leak, does not have holes, and does not peel off easily and is easy to clean. Ventilation holes are 20% of the available floor area. Place of presentation or display, This place for serving or displaying food must be closed to protect food from dust, insects and other pests. This is so that the food is not contaminated by disease outbreaks. Snacks must have a separate serving area from the main meal. Places to eat, Canteen in a closed room, the dining room must have sufficient ventilation so that the hot and humid air in the canteen can be replaced with fresh air. The canteen must provide sufficient and comfortable tables and chairs so that students can move freely. Tables and chairs must be clean, not crowded and the table surface is easy to clean. Sanitation facilities in the canteen, Sanitation facilities in open and closed canteens have the same sanitary requirements, namely the availability of sinks and utensils with clean running water and drying racks. There is a sink with sufficient soap or detergent and clean towels, or tissues at the eating area and at the food processing area. There is an adequate supply of clean water, both for processing needs and washing and cleaning needs. Canteen waste disposal, Open and closed canteens have the same requirements for disposing of canteen waste, including the availability of trash cans that are watertight, non-corrosive, closed and easy to clean so that snack or beverage waste can be properly accommodated in the trash and the waste does not smell. A place to save money, Money is a source of microbial contamination that is often not realized, so the place where money is stored should be far from where food is served or display cases.

Hygiene

The Theory of Catering cited by Suwantini (2004) it is stated that "Hygiene is the study of health and the prevention of diseases". In everyday life, cleanliness is very important and must always be considered. Hygiene must be applied every day to oneself both at home and at work. This is done because Hygiene provides many benefits not only at home but also at work. Work.

According to Yuliarsih R. Widyati (2002) the scope of hygiene includes personal hygiene and food hygiene. Individual hygiene includes all aspects of personal hygiene of the employees (food handlers). Maintaining personal hygiene means maintaining clean living habits and maintaining the cleanliness of all members of the body which includes: Self-appearance, Appearance includes bathing regularly, clean and healthy before entering the kitchen. Hands, Washing hands before and after handling food and nails cut short and unpainted. Hair, Neat and clean hair, always wear a special chef's hat or other head covering to prevent hair from falling into food. Face, Don't overuse cosmetics. Nose, Do not touch your nose while working and do not wipe your face with your hands but use a handkerchief. Mouth, Maintain oral and dental hygiene, do not smoke when preparing food, do not cough towards food, and do not taste food directly from the cooking utensil. Legs, Wear shoes of the right size, change socks every day, and cut toenails short

Most of the food ingredients used in food processing are plant-based foodstuffs derived from plants such as vegetables and fruit. Meanwhile, animal-based ingredients come from animals such as poultry, meat, fish, and others. Animal food ingredients are more easily spoiled/damaged when compared with plant-based foodstuffs. However, with current technological advances, many food preservation techniques have been found so that data maintains and extends the storage life of these foodstuffs.

Sanitary

According to Rente Tampang (2001) sanitation is intentional behavior in cultivating clean living with the intention of preventing humans from coming into direct contact with feces and other hazardous waste materials with the hope that this effort will maintain and improve health.

Soedarmaji (2007) stated that statistics in 2007 showed that more than 60% of foodborne diseases were caused by a lack of understanding of food handlers' sanitation hygiene in processing food. Therefore hygiene and sanitation is needed to maintain cleanliness and prevent disease transmission. Food sanitation aims to ensure food safety and purity, prevent consumers from disease, prevent the sale of food that will harm buyers, and reduce food damage or wastage.

According to Purwiyanto Hariyadi and Ratih Dewayanti (2009), several things related to food handling and storage that need attention include: Perishable raw materials such as meat must be stored at 4.2oC or lower and must be separated from processed materials, Places for receiving and washing raw materials must always be kept clean, no raw materials scattered on the floor, no trash and dirt, and not used as storage or hoarding of damaged/unused goods, Washing equipment needs to be cleaned regularly, so that the purpose of washing is actually achieved. Dirty equipment and washing places will be a source of contamination which will cause problems in the future. If the equipment used is modern washing equipment, then the control functions must work properly (example are temperature and pressure control), The storage room for raw materials and frozen products must always be cleaned, free from disturbing animals and pets

Based on RI Minister of Health Decree No. 1098/Menkes/SK/VII/2003 concerning Sanitation Hygiene Requirements for Restaurants and Restaurants that even a restaurant or canteen must meet several sanitation requirements such as: Clean water: Adequate amount, odorless, tasteless, colorless, the number of germs does not exceed the threshold, chemical levels do not exceed the threshold, Disposal of waste water: Wastewater flows smoothly, there is a grease trap, watertight channels, closed channels, Toilets: Clean, located not directly related to the kitchen or dining room, sufficient clean water available, soap and dryer available, fortunately men's toilets are separated from women's, Trash bins: Garbage is transported every 24 hours, in each waste generating room there is a trash bin, made of waterproof material and has a lid, the capacity of the trash can is lifted by a garbage worker, Handwashing area: Adequate handwashing water is available, soap and dryer are available, made of strong, safe and delicate materials, consisting of three washing chambers/tubs, Place for washing equipment: Availability of sufficient cold water, sufficient availability of hot water, made of strong, safe, and smooth materials, consisting of three washing chambers/tubs, food washing area, sufficient washing water available, made of strong, safe and delicate materials, the washer used contains a pest washing solution

Customer Satisfaction

According to Oliver cited by J Supranto (2001) satisfaction is the level of one's feelings after comparing the perceived performance or results with expectations. According to Kotler (2002) satisfaction is a person's feeling of pleasure or disappointment that arises after comparing perceptions of the performance or results of a product and he hoped.

The level of customer satisfaction is different between perceived performance and expectations. If performance is below expectations, consumers will be disappointed. But if the performance matches expectations, the customer will be satisfied. To create customer satisfaction, companies create and manage a system to acquire more customers than their ability to retain customers.

According to Rambat Lupiyoadi (2001), in determining customer satisfaction, there are five main factors that must be considered by companies, namely: Product Quality: Customers will be satisfied if the results of their evaluation show that the products they use are of high quality, Quality of Service: Especially for the service industry, customers will be satisfied if they get good service or what is expected, Emotional: Customers will feel proud and gain confidence that other people will be amazed at him when using products with certain brands that tend to have a higher level of satisfaction, Price: Products that have the same quality but set relatively cheap prices will provide higher value to their customers, Cost: Customers do not need to incur additional costs or do not need to waste time getting a product or service, they tend to be satisfied with that product or service.

Customer Satisfaction Indicator

According to Kottler's theory in the journal Suwardi (2011), the key to retaining customers is customer satisfaction. Indicators of consumer satisfaction can be seen from: Repurchase: buy back, where the customer will return to the company to look for goods/services, Creating word of mouth (Word-of-Mouth): In this case, customers will say good things about the company to others, Creating a brand image (Brand Image): Customers will pay less attention to brands and advertisements from competing products, Making purchasing decisions at the same company (Buying Decision): Buying another product from the same company.

Method

The research method is used quantitative descriptive research. According to Sugiyono (2013) quantitative research methods are research methods based on the philosophy of positivism, used to examine certain populations or samples, sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative/statistical with the aim of test the hypothesis that has been set. In this study, the independent variables were Hygiene and Sanitation in Food and Beverages, while the dependent variable was Customer Satisfaction.

Measurement for this study using the ordinal scale and Likert scale. According to Kusmayadi and Sugiarto (2000), the ordinal scale and interval scale are more directed to demographics such as gender, age, occupation, and marital status. According to Kuncoro (2003) a Likert scale is a type of measurement scale in which respondents state their level of agreement or disagreement regarding various kinds of statements regarding behavior, objects, or points of occurrence. In this study, the authors use 4 levels.

Results and Discussion

Respondent Demographics

Questionnaires were distributed to customers who had visited the Trisakti Institute of Tourism canteen. The respondent of this research are students of Trisakti Institute of Tourism in year 2016 and 2017. The following is the data obtained.

Gender

		Freq	Percent	Valid Percent	Cumulative Percent
Valid	Man	58	58.0	58.0	58.0
	Woman	42	42.0	42.0	100.0
	Total	100	100.0	100.0	

Source: Primary data processed using SPSS 22.0

Based on the table above, out of the 100 respondents studied, most of the customers who came were male, 58 respondents (58%). Meanwhile, female customers were 42 respondents (42%). This shows that there were more male respondents than woman.

Age

	Freq	Percent	Valid Percent	Cumulative Percent
Valid 16 - 21	98	98.0	98.0	98.0
22 - 27	2	2.0	2.0	100.0
Total	100	100.0	100.0	

Source: Primary data processed using SPSS 22.0

Based on the table above, out of the 100 respondents studied, most of the customers who came were 16-21 years old as many as 98 respondents (98%). Meanwhile, there were 2 respondents (2%) aged 22-27 years. This shows that there were more respondents aged 16-21 years than those aged 22-27 years.

Academic Year

	Freq	Percent	Valid Percent	Cumulative Percent
Valid 2016	71	71.0	71.0	71.0
2017	29	29.0	29.0	100.0
Total	100	100.0	100.0	

Source: Primary data processed using SPSS 22.0

Based on the table above, it can be seen that 71 respondents (71%) were students of the 2016 class and 29 respondents (29%) were students of the 2017 class. It can be concluded that from 100 respondents, there were more students in the 2016 class than class of 2017.

Validity Test Results

This validity test serves to determine whether the statements in the questionnaire are valid or not. The value of the results of this test will be compared with the value of r table, r table is searched at a significance of 0.05% with a value of 0.195 and tested two sides with the amount of data (n) = 100 respondents, if the value of r count > r table then the questionnaire can be declared valid.

Validity Test Result

Hygiene and Sanitation				
No	Statement	R Hitung	R Tabel	Ket
1	The ingredients used are of good quality	0.265	0.196	Valid
2	Food ingredients used according to standards	0.400	0.196	Valid
3	Food storage areas are kept clean	0.426	0.196	Valid
4	Adequate food storage space	0.555	0.196	Valid
5	Food processing facilities are kept clean	0.599	0.196	Valid
6	Food processors look clean and tidy	0.548	0.196	Valid
7	Processed food is transported using clean equipment	0.501	0.196	Valid
8	Processed food has gone through the correct food	0.435	0.196	Valid

	transportation			
9	Serving cooked food has been prepared with the correct cutlery	0.485	0.196	Valid
10	Food is served with clean cutlery	0.544	0.196	Valid
Customer satisfaction				
No	Statement	R Hitung	R Tabel	Ket
1	When the customer is satisfied, the customer will come back to eat at the STP Trisakti canteen	0.319	0.196	Valid
2	Customers will always eat at STP Trisakti canteen	0.488	0.196	Valid
3	Satisfied customers will invite other parties to eat at the STP Trisakti canteen	0.211	0.196	Valid
4	Customers will provide information to other parties about STP Trisakti canteen	0.328	0.196	Valid
5	Customers who come to eat at the STP Trisakti canteen do not pay attention to competitors' products	0.334	0.196	Valid
6	Customers are satisfied with the food products sold in the Trisakti STP canteen	0.515	0.196	Valid
7	Customers will try a different menu that is sold in the STP Trisakti cafeteria	0.312	0.196	Valid
8	Each type of food sold at STP Trisakti canteen has a different taste	0.323	0.196	Valid

Source: Primary data processed using SPSS 22.0

Based on the table above, all statements in the questionnaire are declared valid because the r count is higher than the r table.

Reliability Test Results

In this study the reliability test was carried out by looking at the Alpha coefficient Cronbach. Ghazali (2005:42) which said that the questionnaire can be said to be reliable if the results of the static Alpha test $\alpha > 0.60$.

Reliability Test Result

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.725	.725	10

Source: Primary data processed using SPSS 22.0

Based on the table above, it can be seen that the level of reliability of the questionnaire (Cronbach Alpha) on Hygiene and Sanitation is 0.725 so it is reliable.

Reliability Test Result

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.484	.485	8

Source: Primary data processed using SPSS 22.0

Based on the table above, it can be seen that the reliability level of the questionnaire (Cronbach Alpha) on customer satisfaction is 0.484 so it is quite reliable.

Descriptive Statistics Test Results (Mean)

In this descriptive statistical test, it will display and analyze the results of the average or mean value of variable X and variable Y. The following are the results of the descriptive statistical test obtained:

Mean Hygiene and Sanitation

	N	Mean	Std. Deviation
Choice1	100	3.19	.394
Choice2	100	3.19	.443
Retention1	100	3.16	.465
Retention2	100	3.23	.529
Processing1	100	3.22	.524
Processing2	100	3.15	.479
Carried1	100	3.21	.478
Carried2	100	3.56	.519
Presentment1	100	3.29	.478
Presentment2	100	3.23	.468
Valid N (listwise)	100		
Total Mean		32.43	
Mean		3.24	

Source: Primary data processed using SPSS 22.0

From the table above, it can be concluded that according to 100 respondents, Hygiene and Sanitation in the STP Trisakti Canteen is considered quite good with an average score of 3.24 on a scale of 2.60 – 3.39.

Mean Customer satisfaction

	N	Mean	Std. Deviation
Purchase1	100	3.29	.456
Purchase2	100	3.18	.500
Word of mouth1	100	3.29	.518
Word of mouth2	100	3.15	.411
Brand Image1	100	3.16	.526
Brand Image2	100	3.23	.489
Decision1	100	3.32	.469
Decision2	100	3.18	.386
Valid N (listwise)	100		
Total Mean		25.8	
Mean		2.58	

Source: Primary data processed using SPSS 22.0

From the table above, it can be concluded that according to 100 respondents, Customer Satisfaction is considered not good with an average score of 2.58 on a scale of 1.80 – 2.59.

Correlation Coefficient Test Results

		Hygiene and Sanitation	Customer satisfaction
Hygiene and Sanitation	Pearson Correlation	1	.388**
	Sig. (2-tailed)		.000
	N	100	100
Customer satisfaction	Pearson Correlation	.388**	1
	Sig. (2-tailed)	.000	
	N	100	100

Source: Primary data processed using SPSS 22.0

Based on the table above, a correlation coefficient of 0.388 is obtained on a scale of 0.30 – 0.49 which means that the magnitude of the relationship or influence of Hygiene and Sanitation on Customer Satisfaction in the Trisakti Institute of Tourism Canteen is low and has a positive linear relationship. A positive linear relationship shows that if the value of Hygiene and Sanitation is high, then Customer Satisfaction has a high value, and vice versa.

Determination Coefficient Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.388 ^a	.150	.142	1.62868

Source: Primary data processed using SPSS 22.0

It is known that the coefficient of determination (R Square) is 0.15. This value is obtained from the results of squaring the value of the correlation coefficient (R), which is equal to 0.388. By using the coefficient of determination formula, the value of 0.15 is multiplied by 100%, the result is 15%. While the remaining 100% minus 15% is 75% influenced by other variables not examined in this study.

Conclusions and Recommendations**Conclusion**

Based on the results of the analysis carried out to determine the Effect of Hygiene and Sanitation on Customer Satisfaction at Trisakti Institute of Tourism Canteen, the conclusions that can be drawn are as follows:

Hygiene and Sanitation in the Trisakti Institute of Tourism Canteen is considered quite good with an average score of 3.24. Customer satisfaction at Trisakti Institute of Tourism Canteen is considered not too good with an average score of 2.58.

There is a low strength influence between Hygiene and Sanitation on Customer Satisfaction in the Trisakti Institute of Tourism Canteen with a correlation coefficient of 0.388 on a scale of 0.30 – 0.49 and has a positive (unidirectional) relationship.

The percentage of the effect of hygiene and sanitation on customer satisfaction at Trisakti Institute of Tourism canteen is 15%, the remaining 75% is influenced by other factors that not examined in this research.

Suggestion

Based on the conclusions that have been described, the authors can provide suggestions as follows:

Hygiene and sanitation in the Trisakti Institute of Tourism canteen need to be improved, especially in terms of food processing. Not only the place used to process the food that will be served to customers, but also the processing personnel who will process the food.

Adequate facilities will also help in increasing the level of customer satisfaction. In addition, there is a need to increase the promotion of Trisakti Institute of Tourism canteen which can be done by word of mouth. This can also contrive students who usually buy food and drinks from outside the canteen to buy food and drinks in the canteen area.

All students and lecturers should always maintain the cleanliness of all area in the campus canteen so everyone who eats in the canteen can feel comfortable. This can also be seen favorably by parties outside the campus who come to visit and eat at the campus canteen.

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