

Customer's Satisfaction and Participation with University Cafeteria Food Services at a Seventh-day Adventist Tertiary Institution in Jamaica

Tabitha M. Muchee¹, Vinola Richards¹, Simone Morgan¹, James Fallah²,
Jacqueline Vigilance³, Paul Andrew Bourne⁴, Caroline McLean⁵

¹*Department of Nutrition and Dietetics, Northern Caribbean University,
Mandeville, Manchester, Jamaica, W.I.*

²*Department of Dental Hygiene, Northern Caribbean University, Mandeville,
Manchester, Jamaica, W.I.*

³*Department of Graduate Research, Northern Caribbean University,
Mandeville, Manchester, Jamaica, W.I.*

⁴*Department of Institutional Research, Northern Caribbean University,
Mandeville, Manchester, Jamaica, W.I.*

⁵*Department of Nursing, Northern Caribbean University, Mandeville, Manchester, Jamaica, W.I.*

Abstract

Background: The operators of Seventh-day Adventist (SDA) universities' Cafeterias have the most challenging task of serving a community of individuals that are typically diverse, dynamic, and most of the time confined at the University.

Aim: This study aimed to determine the level of customer satisfaction with the University Cafeteria food services at a Seventh-day Adventist tertiary institution.

Methodology: The study used a quantitative design, namely non-probability convenience- sampling with a sample size of one hundred and thirty-five. Data gathering occurred during the 2019 Fall semester and 2021 Spring semester among staff, faculty, third-year, and fourth-year students who utilized the university Cafeteria before Covid 19. Google forms served as the data repository. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 27.0.

Results: Most respondents were non-vegetarians (76.3%) who rarely (50.4%) ate in the Cafeteria. Of the total respondents, 53.3% dined with a friend, and 71.1% sought menu diversity by going elsewhere to eat. Some respondents (37.1%) were dissatisfied with the food quality, management and preparation. However, the majority (62.9%) were satisfied with the Cafeteria environment. Food items such as sweetened beverages and sodas were available every day. Whole grains, vegetables, non-fried vegetables, nuts, legumes, beans, white bread, fruit juices, unsweetened drinks,

yoghurt, pastries, high sugar foods, refined grains, and tin cheese were most available at the time. In contrast, olive oil, vegetarian cheese, and gouda cheese were unavailable.

Conclusion: The Cafeteria management should develop a monthly cycle menu that provides greater diversity in menu items and a variety of food choices for diners.

Keywords: Customer's satisfaction, Cafeteria food services, food quality, healthy food choices.

Introduction

While offering quality education is paramount for the university, food services can play a vital role in developing a holistic person (Kesten, 1997). Food served in the university Cafeteria strongly impacts the students, faculty, and staff's health and well-being. Students spend most of their hours attending classes, doing research work or socializing with their peers. Likewise, University faculty and staff spend their day working in the University. Therefore, students, faculty, and staff are expected to consume foods from the University Cafeteria. Since food plays a vital role in life, students, faculty, and staff need proper foods that provide the required nutrition to help them maintain and develop their capability of learning and work, respectively.

Food choices for university students require proper planning since this is the time students exhibit a distinct decline in nutritional priorities, and poor eating habits often worsen during this time. A hallmark of most student diets is fast food high in fat and sodium content (U.S. Department of Health and Human Services, 2001). Starting college often represents the first time many people assume primary responsibility for their meals. Hence, the type of food offered in the university Cafeteria should be seriously considered.

The overall university population is predicted to increase with exemplary university foodservice. Increasing enrollment should motivate the food managers and organizers to meet customers' expectations and needs (Martin et al., 1992). The Universities are concerned with improving the enrollment and are also primarily concerned with retaining the student. This can be achieved by offering foods that lead to the consumer's satisfaction. An attractive Cafeteria will also become a pleasant space for students to meet their social needs. If the kind of food available to the students may not appeal to them or be inappropriate to their taste, it could be a reason for them to become dissatisfied with the institution. It may also encourage customers to search for alternative eating places off-campus (Gassenheimer et al., 1998).

Garg and Kumau (2017) showed that food and beverage quality significantly relates to customer satisfaction. Food and beverage quality and price are critical components that attract customers to dine in the Cafeteria. Therefore, the Cafeteria administrators need to look into staff training and development and ensure the Cafeteria provides fresh foods in the menu choices. Garg and Kumau (2017) recommended that Cafeteria operations introduce strategies such as cycle menu planning,

a series of food menus planned by the food service operations for a specific period. The Cafeteria manager should also consider offering more choices catering to the vegetarians and the international clientele as many international students and staff work in the university.

Seventh-day Adventist Institutions Cafeteria operators have the most challenging task of serving a community of individuals that is typically diverse, dynamic, and most of the time confined in the University. More importantly, the University is guided by the mission and philosophy of Seventh-day Adventists, which embraces so dearly the healthy message prophesied by Ellen G. White. To maintain its mission, offering healthy and nutritious foods that will make us keep our bodies as the temple of the Holy Ghost and to live a life free from sickness is very crucial (Council of Diet and Food, 18.4 & 26.1). There is a need to improve food service quality by developing health with diversity and variety. This study was taken to explore the current situation of customer's satisfaction and participation with the SDA educational institution's Cafeteria food services

Specifically, the study seeks to

1. To find out the demographic characteristics of participants such as gender, age, education, occupation, race, eating in the Cafeteria.
2. To determine the level of customer's satisfaction with the food quality, environment, management, and food preparation at an SDA Cafeteria.
3. To identify the customer's perception of the availability of healthy food choices at the Cafeteria.
4. To find out how Cafeteria food service management can be improved to increase customer's satisfaction and participation.
5. To determine the statistical relationship between customers' demographic characteristics and their satisfaction with the food quality, environment, management and food preparation at an SDA Cafeteria.

Null hypothesis

There is no significant relationship between participants' demographic characteristics and customers' satisfaction with the food quality, environment, management and food preparation at an SDA educational institution's cafeteria.

Operational Definition of terms

Customer's satisfaction. Hunt (1977), quoted by Peyton et al. (2003), observed that satisfaction means a way of abandoning experience and its evaluation. One can have a pleasant experience that caused dissatisfaction because no matter how nice it was, it did not prove to be as pleasant as expected. This study will evaluate customers' satisfaction with food quality, environment, management and food preparation.

Food availability. Both healthy and unhealthy food items may include a variety of fruits, whole grains, vegetables, non-friend vegetables, cereals, nuts, legumes, beans, brown rice, brown bread, fruits juices, unsweetened beverages, fat-free milk, soy beverages, yoghurt, vegetable oil, olive oil, high sugar foods, refined grains, tin cheese, vegetarian cheese, cheddar cheese, and Gouda cheese.

Food preparation methods. Include food prepared with oil, salt, hot spices, and cheese.

Food quality. Food quality in taste, menu items, freshness, variety, quality, appearance, portion size, shape, colour, texture, and temperature.

Environment, Means clean floor and wall, clean table and chairs, try return area, comfortable seating and dining area, seating capacity, ambience, and hygiene of facilities.

Management. Includes waiting time for foodservice, politeness of Cafeteria staff, customer service, on-time delivery of food to serving line, and price of food items.

Items. Includes foods such as menu variety, menu attractiveness, food display, food portion; facility such as equipment, food layout, bathrooms, hand washing sinks; environment such as attractive, clean environment, sitting capacity, and Cafeteria location; personnel/employee that includes personnel training, politeness of employee, alertness of employees, customer service; and service: service quality, ordering process, price to be reduced, and reduce time to wait for food.

Theoretical and Conceptual Framework

This study uses the Expectation Theory (ET), developed by Oliver (1996). The ET holds that satisfaction/dissatisfaction results from a customer's comparison of performance (of a product or service) with predetermined standards of performance. According to the view, the predetermined criteria are the customer's predictive expectations. Positive disconfirmation occurs when performance is perceived as better than the predetermined expectations. In this scenario, the customer is delighted. Zero disconfirmation occurs when performance is perceived to be precisely equal to expectations-customers are likely to be satisfied. Finally, negative disconfirmation occurs when performance is lower than expectations. Of course, negative disconfirmation leads to dissatisfied or unhappy customers. According to Tardi(2020), customer satisfaction is a key performance indicator that tracks customers' satisfaction with the organization's products or services. The customer's expectations measure it. Knowing those expectations can dramatically increase customers' loyalty to a brand.

The current study will use this ET to evaluate customers' satisfaction with the food quality, environment, management, food preparation, and food availability in the Cafeteria to influence the future changes that will lead to their satisfaction. The participants will further suggest areas of improvement, leading to more satisfaction with the University cafeteria foods.

Figure 1 below presents the conceptual framework of this study with independent and dependent variables. Independent variables participant’s demographic characteristics, availability of healthy food choices, areas of improvement while dependent variables include customer’s satisfaction with food quality, environment, management and food preparation.

Independent variables

Dependent Variables

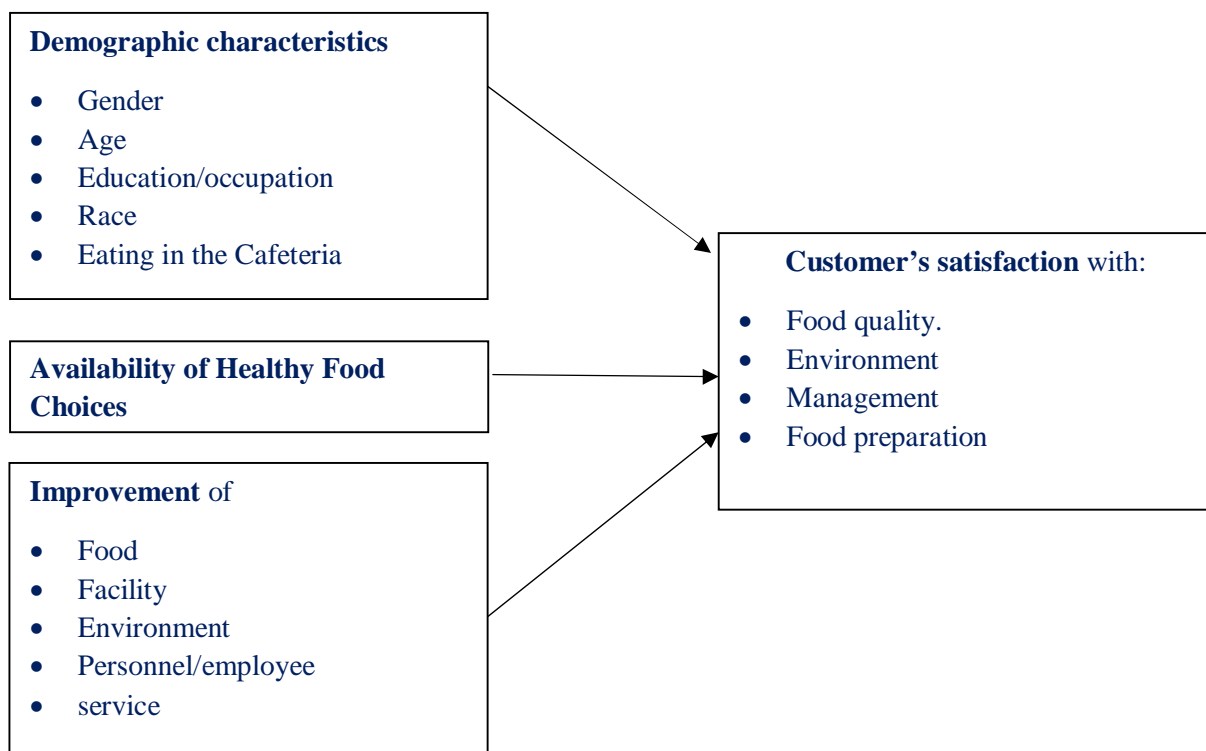


Figure 1. Conceptual Framework

Literature Review

Numerous studies have investigated factors that affect customer satisfaction among food service patrons at higher education institutions (Akbara, et al., 2021; Chang & Suki, 2018; Garg & Kumar, 2017; Lugosi, 2019; Nadzirah et al., 2013; Petrescu et al., 2020; Ryu & Han, 2010; Serhan & Serhan, 2019). However, few of those studies focus on Seventh-day Adventist tertiary institutions, indicating a gap in current research information. A review of the available scientific literature has revealed that some of the most common factors that affect customer satisfaction include food quality, physical environment, and service quality.

Nadzirah et al. (2013) found a pattern of higher negative perception towards University Cafeteria. Perception consequently influences customer satisfaction, where evident negative perception contributes to dissatisfaction amongst the research subjects. Most of them were Neutral, while 19.1 % were satisfied with current catering facilities. 24.4 % expressed their dissatisfaction with the existing Cafeteria operations. Ruetzler and Meyer (2005) suggested that the operators and management of the University must take action in enhancing its standards

because it is essential to have continual and integral improvement of on-campus university foodservice.

Several studies agree that food quality directly correlates with customer satisfaction (Garg & Kumar, 2017; Nadzirah et al., 2013; Petrescu et al., 2020; Ryu & Han, 2010; Serhan & Serhan, 2019). Other studies found similar conclusions (Garg & Kumar, 2017; Nadzirah et al., 2013; Serhan & Serhan, 2019) conducted tertiary institutions in different countries using a small sample size or convenience sampling. Although caution is essential when generalising research conclusions that use convenience sampling, these studies show a definite pattern between food quality's relationships with customer satisfaction.

Furthermore, Ryu & Han (2010) and Petrescu et al. (2020) indicated a connection between food quality and consumer satisfaction, despite their stark differences from the previously mentioned studies. However, these studies did not occur at tertiary institutions. Ryu & Han (2010) obtained questionnaire responses from customers from three different fast-food restaurants. Unfortunately, the results in this study did not distinguish responses from each of these restaurants. More precise results from exciting addition may have clarified if the type of restaurant would significantly affect the results.

On the other hand, Petrescu et al. (2020) obtained questionnaire responses from consumers from two countries who ate at any eating establishment. In addition, their sample size was noticeably more significant than previously mentioned studies. These authors provided clarity into factors their respondents use to determine food quality. These factors include "freshness, taste and appearance" (Petrescu et al., 2020). These are the factors that most consumers use to judge food quality. In Garg and Kumar's study, "size, shape, colour, gloss, consistency and texture" are additional factors used to evaluate food quality (2017). Consequently, this current study's questionnaire contains most of these factors in addition to food temperature.

Similarly, other studies found that the physical environment positively affected customer satisfaction (Nadzirah et al., 2013; Ryu & Han, 2010; Ryu & Han, 2011; Ryu et al., 2012; Serhan & Serhan, 2019). When considering the physical environment, Ryu and Han (2011) provided an extensive description of what the physical environment includes. Aspects such as the "facility aesthetics, lighting, ambience, layout, table settings, and service staff" (Ryu & Han, 2011). Ryu and Han (2011) differentiated aesthetics from the layout. They referred to esthetics as the architecture of the food establishment, whereas the design included placing objects like furnishings and equipment within the building. In addition, the service staff was a part of the physical environment because it considers employees' appearance, gender and the number of employees available. However, the staff's interaction with customers was excluded from the physical environment component.

Ryu and Han (2011) further considered the difference between customers' expectations and experience, classified as their perception. Oliver (1997), as cited by Ryu & Han (2011), described a discrepancy in customers' expectations and perception as disconfirmation. Ryu and

Han (2011) concluded that the aesthetics of the food establishment, the ambience, table settings and service staff positively affected customers' perceived disconfirmation. They also found a positive connection between perceived disconfirmation and customer satisfaction. However, this research did not differentiate the results according to consumers' demographics. Demographics would be an essential consideration in this current study. The student and staff population at Northern Caribbean University is diverse in terms of age, gender, year of study, among other factors, but its large cohort of international representatives make nationality and culture an essential aspect of customer satisfaction that require consideration.

Another notably important aspect of the physical environment is the cleanliness of the food service establishment (Nadzirah et al., 2013). In this study, cleanliness was the most negatively rated feature of the establishment. Respondents' feedback mainly reflected a desire to improve the cleanliness of the food service area. Nadzirah et al. (2013) believed that honouring these respondents' requests would improve customer satisfaction. However, the research done by Ryu et al. (2012) did not support this relationship between a clean environment's effects on consumer satisfaction. This research sought to determine the indirect relationship between the quality physical background and customer satisfaction by first determining whether a significant relationship existed between the physical environment and perceived value. Zeithaml (1988), as cited by Ryu et al. (2012), argued that consumers determine perceived value by comparing the benefit and cost they experienced after purchasing a service or item. So, although Ryu et al. (2012) concluded that perceived value had a significant positive effect on customer satisfaction, there was no significant relationship between the physical environment and perceived value. Hence, one could conclude that no significant relationship existed between the physical environment and consumer satisfaction. However, this study used a convenience sample, so caution is essential when generalizing the results since this study contradicts the previously mentioned results.

The concept of customer perception also applies to service quality (Smith & White-McNeil, 2020). Parasuraman et al. (1991), as cited by Smith & White-McNeil (2020), described service quality as a customer's assessment of an organization's expected service performance compared to the experience, which means that one customer's perception of service quality may differ from the next, even if they are among a group of people at the same table exposed to the same service. Their individual experiences can still be different (Smith & White-McNeil, 2020). Consumer's cultural differences may play a role as well. The importance of service quality is further emphasized based on current data, which shows that service quality has a significant positive effect on customer satisfaction (Mensah & Mensah, 2018; Serhan & Serhan, 2019; Smith & White-McNeil, 2020; Thomas, 2015). This trend is evident despite the different locations, cultural backgrounds, and research limitations.

Based on the previously mentioned studies, there is overwhelming evidence that certain common factors affect customer satisfaction in the foodservice industry. The focus was specific among consumers of foodservice in tertiary institutions. These factors include food quality, physical environment, and service quality. The consensus among the available data is that these factors

have a significant favourable influence on customer satisfaction. However, previous studies were conducted in various locations and often used convenience sampling, which is not generalizable. As a result, this current study would provide valued information specific to foodservice consumers at a Seventh-day Adventist tertiary institution.

Methods and Materials

The research design

This study used a quantitative research design to empirically examine the proposed hypothesis to see the relationship among variables. Data collection was during fall semester 2019 and Spring Semester 2021 among staff, faculty and third-year and fourth-year students. This intervention entailed a multicomponent strategy involving all stakeholders of the Cafeteria.

As Andaleeb and Caskey (2007) explained, including staff and faculty as research subjects are essential because the Cafeteria is not limited to students.

Sampling procedure

Considering the large population of the student's faculty and staff, a random- non-probability - convenience sampling provided convenient accessibility and proximity to the researcher. Inclusions of participants that met the criteria of informants for this study and agreed to be part of the research were:

- (1) must be students, staff or faculty of the institution, and
- (2) must have worked or studied at said University for a minimum of 1 year before COVID -19 Pandemic.

Data gathering procedure

Some participants had filled the questionnaires before COVID -19 Pandemic. Contact with other participants occurred by telephone and email to request participation in the research. Then, they were sent links to the online questionnaire.

Research instrument

- (1) The research instruments consisted of five parts. 1. The first part consisted of demographic characteristics such as gender, age, education, occupation, race, eating in the Cafeteria. The participants checked in the boxes the answer that described their position.
- (2) In the second part, the participant checked their level of satisfaction or dissatisfaction with the current situation of the Cafeteria in terms of food quality, environment and management. The measurement scale of this section was based on 5- point Likert scale that ranged from '1' being totally dissatisfied and '5' very satisfied.

- (3) In the third part, the participant indicated the availability of healthy or unhealthy foods in the Cafeteria by indicating whether the foods were available all the time, available most of the time, rarely available, or not at all available using a scale of 4.
- (4) The fourth part was a list of 14 items of improving the Cafeteria that needed to be ranked, beginning with the most critical items to be improved to the least important.

Data analysis

Following data collection, the researchers analyzed the data using Statistical Package for the Social Science (SPSS) version 27.0, used for reliability, descriptive, and correlation analysis to test the hypotheses. To accomplish the objective of this study, statistical tests, such as frequencies and percentages, means of scores, and coefficients of Pearson correlation was used. Computation of frequencies and percentages occurred to examine demographic characteristics, gauge customers' satisfaction level, availability of healthy and unhealthy food choices, and improvement of the Cafeteria. Person correlation coefficients were calculated to measure the existence and degree of significant relationships between the research variables.

Significance of the study

1. There was an increase in student, faculty and staff satisfaction with school meals and increased participation in Cafeteria meals programs,
2. expanded service of healthy foods,
3. a better nutritional content of the university Cafeteria and increased revenue,
4. The University should consider increasing resources for school meals such as
 - a. investment in better foods to support the provision of healthier foods, and
 - b. modernized preparation and service equipment to support the provision of more nutritious foods.
5. The University should continue its outreach and technical assistance to help provide training for school food service professionals,
6. The University should work with all stakeholders to develop innovative ways to encourage students to make healthier choices, and
7. The University should connect school meals programs to local growers and use the farm to school programs where possible to incorporate more fresh, appealing food in school meals.

Results

Table 1 displays the respondents' demographic characteristics, including gender, age, frequencies of eating in Cafeteria, dining in Cafeteria, eating elsewhere, reasons for eating elsewhere, and food preference. Of the sampled respondents (n=135), majority were females 132 (n=97.8%), were in the age category of 17-24 105 (n=77.8%), rarely ate in Cafeteria 68(n=50.4%), dined with friends in the Cafeteria 71(n=53.3%), often went elsewhere to eat 66(n=48.9%), the reason for eating elsewhere was for menu diversity ((57%), and their food preference was non-vegetarians 103(n=76.3%).

Table 1. Demographic characteristics of the sampled Respondents, n=13

Details	Variable	Frequency	Percent
Gender	Male	3	2.2
	Female	132	97.8
Age	17-24	105	77.8
	25-32	30	22.2
Frequencies of eating in Cafeteria	Daily	11	8.1
	Often	45	33.3
	Rarely	68	50.4
	Never	11	8.1
Dining in Cafeteria	Alone	14	10.4
	With friends	71	53.3
	Take away	49	36.3
Eating elsewhere	Daily	30	22.2
	Often	66	48.9
	Rarely	28	20.7
	Never	10	7.4
Reason for eating elsewhere	Menu Diversity	77	57
	Food Quality	34	25.2
	Other reasons	12	8.9
	Total	123	91.1
Food Preference	Vegetarian	17	12.6
	Non vegetarians	103	76.3
	Others (both)	15	11.1

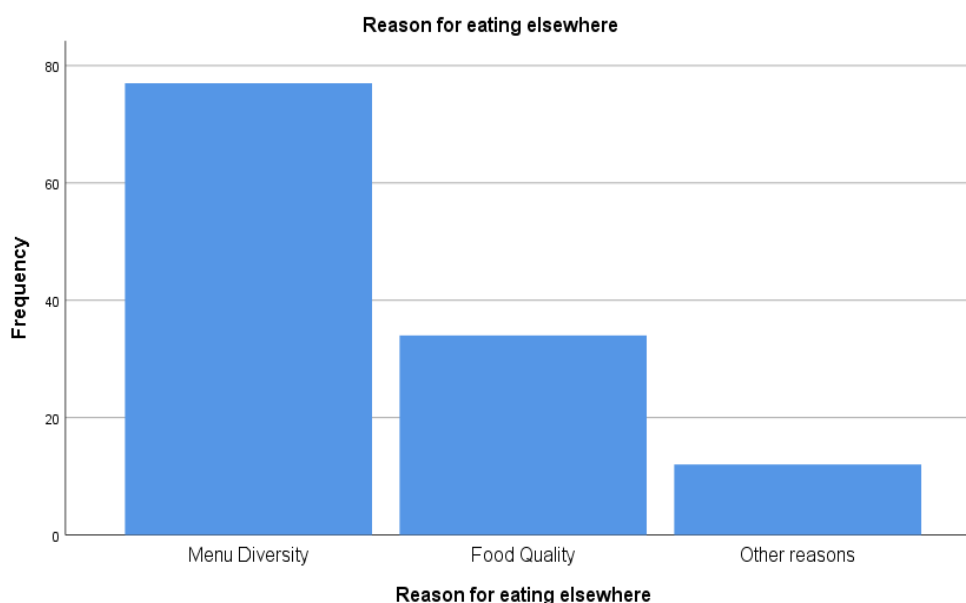


Figure 1. Reasons for eating elsewhere

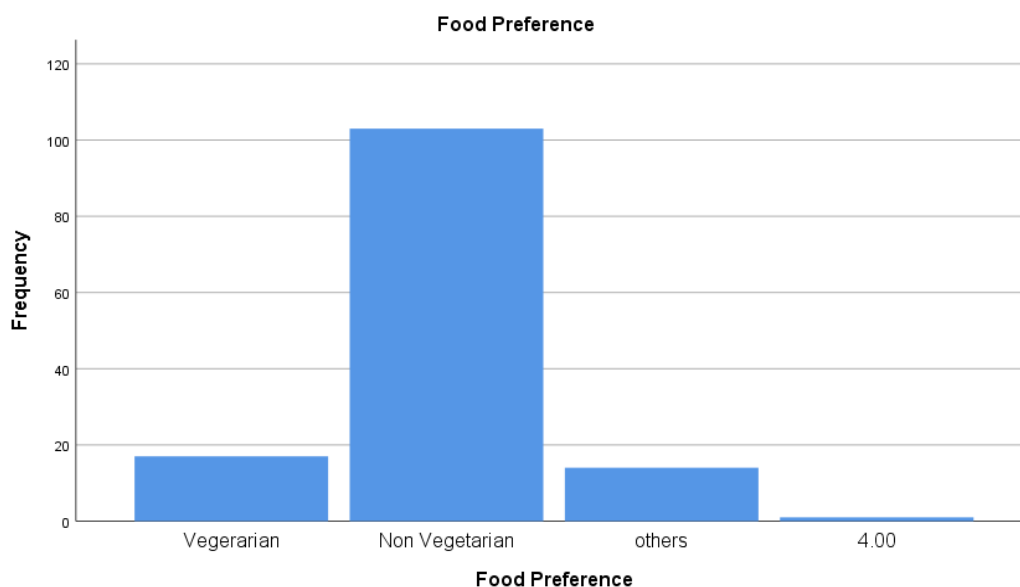


Figure 2. Vegetarians vs non-vegetarians

Table 2 below depicts the data on satisfaction or dissatisfaction with the Food Quality, environment and management. Of the sampled respondents, in terms of food quality, the majority were neither satisfied nor dissatisfied with the taste 62(46%), menu 63(47%), food freshness 64(64%), quality of food 68(50%), food appearance 57 (42%), food portion, the shape of food 75(56%), the colour of food 76(56.3%), food texture 77(57%), very unsatisfied with variety 63 (47%), and very satisfied with the temperature of the food when served 70(51.9%). In terms of environment, the respondents were very satisfied with the cleanliness of floor and walls 85(62.9%), clean tables and chairs (48.9%), tray return area (36.3%), comfortable seating and dining area (56.3%), seating capacity (49.7%), and ambience (45.2%) however they were very unsatisfied with the hygiene facilities (57%). Regarding the management, the respondents were very unsatisfied with the waiting time for food to be served (57%), delivery of food on time (51.1%), and price of food (40%). Respondents were satisfied neither dissatisfied with the politeness of staff, the appearance of employees (49.6%), alertness of Cafeteria staff (51.1%), and Customer service (45.9%),

Table 2. Satisfaction or dissatisfaction with the food quality, environment and Management

ITEMS	LABEL	VARIABLES	FREQUENCY	PERCENT
Food Quality	Taste	Very Unsatisfied/Unsatisfied	30	22
		Neutral	62	46
		Very Satisfied/satisfied	43	32
	Menu Items	Very Unsatisfied/Unsatisfied	49	36
		Neutral	63	47
		Very Satisfied/satisfied	23	17
	Food Freshness	Very Unsatisfied/Unsatisfied	22	16.3
		Neutral	64	64
		Very Satisfied/satisfied	49	36

	Variety	Very Unsatisfied/Unsatisfied	63	47
		Neutral	44	33
		Very Satisfied/satisfied	28	20
	Quality of Food	Very Unsatisfied/Unsatisfied	26	19
		Neutral	68	50
		Very Satisfied/satisfied	41	30
	Food appearance	Very Unsatisfied/Unsatisfied	29	21
		Neutral	57	42
		Very Satisfied/satisfied	49	36
	Food portion	Very Unsatisfied/Unsatisfied	30	22
		Neutral	55	41
		Very Satisfied/satisfied	50	37
	Shape of food	Very Unsatisfied/Unsatisfied	21	15
		Neutral	75	56
		Very Satisfied/satisfied	40	30
	Color of food	Very Unsatisfied/Unsatisfied	20	14.8
		Neutral	76	56.3
		Very Satisfied/satisfied	39	28.9
	Food texture	Very Unsatisfied/Unsatisfied	21	15.6
		Neutral	77	57
		Very Satisfied/satisfied	37	27.4
	Temperature of food when served	Very Unsatisfied/Unsatisfied	21	15.5
		Neutral	44	32.6
		Very Satisfied/satisfied	70	51.9
Environment	Clean floor and walls	Very Unsatisfied/Unsatisfied	10	7.4
		Neutral	40	29.6
		Very Satisfied/satisfied	85	62.9
	Clean Tables and chairs	Very Unsatisfied/Unsatisfied	17	12.6
		Neutral	52	38.5
		Very Satisfied/satisfied	66	48.9
	Tray return area	Very Unsatisfied/Unsatisfied	28	20.7
		Neutral	58	43
		Very Satisfied/satisfied	49	36.3
	Comfortable seating and dining area	Very Unsatisfied/Unsatisfied	12	8.8
		Neutral	47	34.8
		Very Satisfied/satisfied	76	56.3
	Seating capacity	Very Unsatisfied/Unsatisfied	19	14.1
		Neutral	49	36.3
		Very Satisfied/satisfied	67	49.7
	Ambience	Very Unsatisfied/Unsatisfied	14	10.4
		Neutral	60	44.4

		Very Satisfied/satisfied	61	45.2
	Hygiene facilities	Very Unsatisfied/Unsatisfied	77	57
		Neutral	34	25.2
		Very Satisfied/satisfied	24	17.8
Management	Waiting time	Very Unsatisfied/Unsatisfied	77	57
		Neutral	34	25.2
		Very Satisfied/satisfied	24	17.8
	Politeness of staff	Very Unsatisfied/Unsatisfied	35	25.9
		Neutral	65	48.1
		Very Satisfied/satisfied	35	25.9
	Appearance of employee	Very Unsatisfied/Unsatisfied	20	14.8
		Neutral	67	49.6
		Very Satisfied/satisfied	48	35.5
	Alertness of Cafeteria Staff	Very Unsatisfied/Unsatisfied	32	23.7
		Neutral	69	51.1
		Very Satisfied/satisfied	34	25.2
	Customer Service	Very Unsatisfied/Unsatisfied	37	27.5
		Neutral	62	45.9
		Very Satisfied/satisfied	36	26.7
	Delivery of food on time	Very Unsatisfied/Unsatisfied	69	51.1
		Neutral	43	31.9
		Very Satisfied/satisfied	23	17
	Price of food	Very Unsatisfied/Unsatisfied	54	40
		Neutral	53	39.3
		Very Satisfied/satisfied	28	20.7

Table 3 present the satisfaction or dissatisfaction of the food items. The respondents were unsatisfied with the food prepared with much oil (60.7%), a lot of salt (50.3%), and they were neutral with food prepared with very hot spices (54.8%), much cheese (55.6%) and fried foods (58.5%).

Table 3.Satisfaction or dissatisfaction with the food preparation

Details		Frequencies	Per cent
Food Prepared with a lot of oil	Unsatisfied	82	60.7
	Neutral	35	25.9
	Satisfied	18	13.3
Food prepared with a lot of salt	Unsatisfied	68	50.3
	Neutral	46	32.1
	Satisfied	21	15.5
Food prepared with very hot spices	Unsatisfied	31	23
	Neutral	74	54.8

	Satisfied	30	22.2
Food prepared with a lot of cheese	Unsatisfied	24	17.8
	Neutral	75	55.6
	Satisfied	36	26.7
Fried food	Unsatisfied	26	19.3
	Neutral	79	58.5
	Satisfied	30	22.2

Table 4 depicts the availability of the food items in the Cafeteria menu. From the sampled respondent's majority acknowledge that a variety of fruits (41.5), cereals (39.3%), and cheddar cheese (28.9%) are rarely available. Variety of Whole grains (47.4%), vegetables (57%), non-fried vegetables (60.7%), nuts (44.4%), legumes (51.9%), beans ((60%), white bread (35.6%), 100% fruit juices (44.4%), unsweetened beverages (34.8%), yogurt (34.8%), pastries (47.4%), high sugar foods (36.3%), refined grains (41.5%), and tin cheese (37.8%), are available most of the times. Sweetened beverages (48.1%), sodas (38.5%) are available every day. Fat-free cow's milk (37.8%), soy beverages (36.3%), and vegetable oils (35.6%) are rarely available. Olive oil (37%), vegetarian cheese (43%), and Gouda cheese (55.6%) are not available.

Table 4. The availability of the food items in the cafeteria Menu

Details		Frequency	Per cent
Variety of fruits	Not available	9	6.7
	Rarely Available	56	41.5
	Available most of the times	61	45.2
	Available everyday	9	6.7
Variety of whole grains	Not available	11	8.1
	Rarely Available	47	34.8
	Available most of the times	64	47.4
	Available everyday	13	9.6
Variety of Vegetables	Not available	7	5.2
	Rarely Available	28	20.7
	Available most of the times	77	57
	Available everyday	23	17
Non-fried vegetables	Not available	9	6.7
	Rarely Available	26	19.3
	Available most of the times	82	60.7
	Available everyday	18	13.3
Cereals	Not available	30	22.2
	Rarely Available	53	39.3
	Available most of the times	42	31.1
	Available everyday	10	7.4
Nuts	Not available	14	10.4

	Rarely Available	34	25.2
	Available most of the times	60	44.4
	Available everyday	27	20
Legumes	Not available	5	3.7
	Rarely Available	21	15.6
	Available most of the times	70	51.9
	Available everyday	39	28.9
Beans	Not available	3	2.2
	Rarely Available	11	8.1
	Available most of the times	81	60
	Available everyday	40	29.6
Brown rice	Not available	19	14.1
	Rarely Available	35	25.9
	Available most of the times	68	50.4
	Available everyday	13	9.6
White Bread	Not available	14	10.4
	Rarely Available	43	31.9
	Available most of the times	48	35.6
	Available everyday	30	22.2
100% fruit juices	Not available	15	11.1
	Rarely Available	33	24.4
	Available most of the times	60	44.4
	Available everyday	25	18.5
Unsweetened beverages	Not available	28	20.7
	Rarely Available	47	34.8
	Available most of the times	47	34.8
	Available everyday	11	8.1
Sweetened beverages	Not available	7	5.2
	Rarely Available	12	8.9
	Available most of the times	48	35.6
	Available everyday	65	48.1
Sodas	Not available	19	14.1
	Rarely Available	16	11.9
	Available most of the times	45	33.3
	Available everyday	52	38.5
Fat free cow's milk	Not available	31	23
	Rarely Available	51	37.8
	Available most of the times	45	33.3
	Available everyday	7	5.2
Soy beverages	Not available	26	19.3
	Rarely Available	49	36.3

	Available most of the times	50	37
	Available everyday	9	6.7
Yoghurt	Not available	30	22.2
	Rarely Available	44	32.6
	Available most of the times	47	34.8
	Available everyday	13	9.6
Vegetable oils	Not available	26	19.3
	Rarely Available	48	35.6
	Available most of the times	43	31.9
	Available everyday	17	12.9
Olive oil	Not available	50	37
	Rarely Available	47	34.8
	Available most of the times	32	23.7
	Available everyday	5	3.7
Pastries	Not available	6	4.4
	Rarely Available	19	14.1
	Available most of the times	64	47.4
	Available everyday	45	33.3
High sugar foods	Not available	6	4.4
	Rarely Available	28	20.7
	Available most of the times	49	36.3
	Available everyday	51	37.8
Refined grains	Not available	18	13.3
	Rarely Available	43	31.9
	Available most of the times	56	41.5
	Available everyday	17	12.6
Tin cheese	Not available	28	20.7
	Rarely Available	30	22.2
	Available most of the times	51	37.8
	Available everyday	25	18.5
Vegetarian cheese	Not available	58	43
	Rarely Available	36	26.7
	Available most of the times	32	23.7
	Available everyday	8	5.9
Cheddar cheese	Not available	37	27.4
	Rarely Available	39	28.9
	Available most of the times	33	24.4
	Available everyday	25	18.5
Gouda cheese	Not available	75	55.6
	Rarely Available	39	28.9
	Available most of the times	18	13.3
	Available everyday	2	1.5

Table 5 depicts the ranking of the items to be improved in the Cafeteria. The items that scored first ranking included menu variety (79.3%), equipment's (music, WIFI) (45.2%), clean environment (38.3%), Customer service (34.8%), and service quality (35.6%). The second items to be ranked included Menu attractiveness (47.4%), bathrooms (33.3%), sitting capacity (40.0%), politeness of employees (40.7%), and ordering process (33.3%). The items that received third-ranking included food display (44.4%), hand washing sinks (32.6%), environment (35.6%), employee's alertness (45.2%), and price to be reduced (35.6%). While the items that received fourth-ranking included food portion (45.2%), food layout (33.3%), cafeteria location (37.0%), and reduced time to wait for food (34.1%).

Table 5. Participants' ranked perspective on the items to be improved in the Cafeteria

Details		1 st ranking %	2 nd ranking %	3 rd ranking %	4 th ranking %	Ranking
Food	Menu Variety	79.3	6.7	7.4	6.7	1
	Menu Attractiveness	6.7	47.4	24.4	21.5	2
	Food display	3.7	25.9	44.4	25.9	3
	Food portion	12.6	19.3	23.0	45.2	4
Facility	Equipment (Music, WIFI)	45.2	5.2	17.0	32.6	1
	Bathrooms	6.7	33.3	20.0	7.4	2
	Hand washing sinks	26.7	30.4	32.6	25.9	3
	Food layout	23.7	30.4	29.6	33.3	4
Environment	Clean Environment	33.3	24.4	18.5	23.7	1
	Sitting Capacity	10.4	40.0	28.1	14.1	2
	Attractive	26.7	20.0	35.6	25.2	3
	Cafeteria Location	31.9	13.1	17.0	37.0	4
Personnel/ employee	Customer Service	34.8	10.4	20.0	39.3	1
	Politeness of employees	25.9	40.7	21.5	21.5	2
	Employee's alertness	10.4	21.5	45.2	45.2	3
	Personal training	30.4	25.9	12.6	26.7	4
Service	Service Quality	35.6	14.8	15.6	28.1	1
	Ordering Process	17.0	33.3	28.9	14.1	2
	Price to be reduced	26.7	20.7	35.6	23.7	3
	Reduce time to wait for food	23.0	29.6	19.3	34.1	4

Table 6 depict the relationship between the independent variables and the dependent variables. There was a statistical relationship between dining in the Cafeteria and reasons for eating elsewhere (P-value 0.38). Food portion and dining in the Cafeteria had a P-value of 0.20. Food shape and eating elsewhere p-value was 0.044, food colour and eating elsewhere had a p-value of 0.017, food texture and eating elsewhere had a p-value of 0.032. Other results were as follows: clean tables and chairs and eating in the Cafeteria (p-value 0.013), try return area and

respondents ethnicity (p-value 0.32), eating in the Cafeteria and comfortable seating and dining area (p-value 0.028), age and employee appearance (p-value 0.034), educational level and alertness of cafeteria staff (p-value 0.019) eating elsewhere and customer service (p-value 0.040), dining in the Cafeteria and food prepared with very hot spices (p-value 0.039), and eating elsewhere and food preparation with much cheese (p-value 0.025). Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted, indicating the relationship between independent and dependent variables.

Table 6. Relationship between independent variables and dependent variables

Correlation table n=135

Models	Pearson Correlation	P-value
Dining in the Cafeteria Reasons for eating elsewhere	-0.187*	0.038
Food portion Dining in the Cafeteria	-0.201*	0.020
Food shape Eating elsewhere	0.174*	0.044
Food color Eating elsewhere	0.207*	0.017
Food texture Eating elsewhere	0.185*	0.032
Clean tables and chairs Eating in the Cafeteria	0.213*	0.013
Tray return area Respondents ethnicity	-0.185*	0.032
Eating in the Cafeteria Comfortable seating and dining area	0.191*	0.028
Age Employee Appearance	-0.183*	0.034
Education level Alertness of Cafeteria Staff	0.201*	0.019
Eating elsewhere Customer service	0.178*	0.040
Dining in the Cafeteria Food prepared with very Hot spices	0.178*	0.039
Eating elsewhere Food preparation with a lot of cheese	0.193*	0.025

* Correlation is significant at the 0.05 Level (2-tailed)

Limitation

Despite the ideal suggestion for Cafeteria Menu development, this implementation might have specific limitations. These limitations are as follows: 1) One of the most prominent barriers is the limited budget, 2) Cooking different ethnic cuisines might require more time and appropriate kitchen equipment. It will also require multicultural skills to prepare such cuisines, 3) Some special ingredients needed for special dishes might have a higher price. Moreover, not all required ingredients are available, or it could be tricky to obtain, and 4) There will be a need to have more staff for specific responsibilities to quickly improve their service quality, primarily focusing on menu development.

Discussion

This study was conducted among 135 respondents to evaluate customers' satisfaction and participation with University Cafeteria food services at a Seventh-day Adventist tertiary institution. The majority of the respondents' majority were females (97.8%), were in the age category of 17-24 (77.8%), rarely ate in the Cafeteria (50.4%), dined with friends in the Cafeteria (50.4%), often went elsewhere to eat (48.9%), the reason for eating elsewhere was for menu diversity ((57%), and their food preference was non-vegetarians (76.3%). The menu offered in this Seventh-day Adventist Cafeteria is vegetarian, yet most of the participants are non-vegetarians hence why they went to eat elsewhere. Garg and Kumau (2017) recommended that Cafeteria operations introduce strategies such as cycle menu planning, a series of food menus planned by the foodservice operations for a specific time. The Cafeteria manager should also consider more choices catering to the vegetarians and the international clientele as many international students and staff work in the University.

In terms of food quality, the majority were neither satisfied nor dissatisfied with the taste (46%), menu (47%), food freshness (64%), quality of food 68(50%), food appearance (42%), food portion, the shape of food (56%), the colour of food (56.3%), food texture (57%); very unsatisfied lack of food variety (47%), and very satisfied with the temperature of the food when served (51.9%). Several studies agree that food quality directly correlates with customer satisfaction (Garg & Kumar, 2017; Nadzirah et al., 2013; Petrescu et al., 2020; Ryu & Han, 2010; Serhan & Serhan, 2019). According to Petrescu et al. (2020), food quality includes "freshness, taste and appearance.

In terms of environment, the respondents were very satisfied with the cleanliness of the floor and walls (62.9%), clean tables and chairs (48.9%), tray return area (36.3%), comfortable seating and dining area (56.3%), seating capacity (49.7%), and ambience (45.2%) however they were very unsatisfied with the hygiene of facilities (57%). Studies done by Nadzirah et al., 2013; Ryu & Han, 2010; Ryu & Han, 2011; Ryu et al., 2012; and Serhan & Serhan, 2019 found that the physical environment had a positive effect on customer satisfaction. However, Ryu et al. (2012) research did not support the relationship between a clean environment's effects on consumer

satisfaction, concluding that there is no significant relationship between the physical environment and customer satisfaction.

In terms of management, the respondents were very unsatisfied with the waiting time for food to be served (57%), delivery of food on time (51.1%), and price of food (40%). Respondents were not satisfied nor dissatisfied with the politeness of staff, the appearance of employees (49.6%), alertness of Cafeteria staff (51.1%), and Customer service (45.9%). Similarly, Nadizirah et al. (2013) showed that the majority of the respondents were neutral with Cafeteria operations. These findings indicate that the operators and management of the University must take action in enhancing its standards because it is important to have continual and integral improvement of on-campus university food services, as emphasised by Ruetzler and Meyer (2005).

The respondents were unsatisfied with the food prepared with a lot of oil (60.7%), a lot of salt (50.3%), and they were neutral with food prepared with very hot spices (54.8%), a lot of cheese (55.6%) and fried foods (58.5%). The majority acknowledged that fruits (41.5%), cereals (39.3%), and cheddar cheese (28.9%) are rarely available. Whole grains (47.4%), vegetables (57%), non-fried vegetables (60.7%), nuts (44.4%), legumes (51.9%), beans ((60%), white bread (35.6%), 100% fruit juices (44.4%), unsweetened beverages (34.8%), yogurt (34.8%), pastries (47.4%), high sugar foods (36.3%), refined grains (41.5%), and tin cheese (37.8%), are available most of the times. Sweetened beverages (48.1%), sodas (38.5%) are available every day. Fat free cow's milk (37.8%), soy beverages (36.3%), and vegetable oils (35.6%) are rarely available. Olive oil (37%), vegetarian cheese (43%), and Gouda cheese (55.6%) are not available. These results contradict the Food-Based Dietary Guidelines for Jamaica (2015) that recommends eating a variety of fruits; vegetables; peas, beans, and nuts; daily and reducing the intake of salty and processed foods, fat and oils, and sugary foods and drinks.

The items that scored first ranking included menu variety (79.3%), equipment's (music, WIFI) (45.2%), clean environment (38.3%), Customer service (34.8%), and service quality (35.6%). The second items to be ranked included Menu attractiveness (47.4%), bathrooms (33.3%), sitting capacity (40.0%), politeness of employees (40.7%), and ordering process (33.3%). The items that received third-ranking included food display (44.4%), handwashing sinks (32.6%), environment (35.6%), employee's alertness (45.2%), and price to be reduced (35.6%). While the items that received fourth-ranking included food portion (45.2%), food layout (33.3%), Cafeteria location (37.0%), and reduced time to wait for food (34.1%). Earlier findings support these current results that showed that the respondents went elsewhere to eat for menu diversity. Moreover, the respondents were very unsatisfied with the lack of variety of foods.

There was statistical relationship between dining in the Cafeteria and reasons of eating elsewhere (p-value = 0.38), food portion and dining in the Cafeteria (p-value = 0.20), food shape and eating elsewhere (p-value = 0.044), food color and eating elsewhere (p-value = 0.017), food texture and eating elsewhere (p-value = 0.032), clean tables and chairs and eating in the Cafeteria (p-value 0.013), try return area and respondents ethnicity (p-value = 0.32), eating in the Cafeteria and comfortable seating and dining area (p-value = 0.028), age and employee appearance (p-value

0.034), educational level and alertness of Cafeteria staff (p-value = 0.019) eating elsewhere and customer service (p-value = 0.040), dining in the Cafeteria and food prepared with very hot spices (p-value = 0.039), and eating elsewhere and food preparation with a lot of cheese (p-value = 0.025). The Null hypothesis that stated there is no significant relationship between participants' demographic characteristics and customers' satisfaction with the food quality, environment, management and food preparation at SDA Educational Institution's Cafeteria is rejected. The alternative hypothesis is accepted that accept the relationships between those variables.

Conclusion

This study concludes that the respondents rarely ate from the University Cafeteria and went to eat elsewhere for menu diversity, with the majority of them being non-vegetarians. In addition, the majority of sampled participants were very unsatisfied with the lack of food variety. However, they were very satisfied with the food temperature when served. Furthermore, the respondents were very satisfied with the environment that included the cleanliness of the floor and walls, tables, chairs, tray return area, comfortable seating, dining area, seating capacity and ambience. However, they were very unsatisfied with the hygiene of facilities. Respondents were very unsatisfied with the waiting time of food to be served, delivery of food on time, and food price.

Recommendations

In light of these research results the following recommendations are of importance:

- Develop a Cycle menu for at least two weeks, and
- Emphasize food service quality by developing health with diversity and variety to cater to a local and international clientele. With diversity, the non-vegetarian participants are likely to be motivated to dine in the Cafeteria.

References

1. Andaleeb, S. S. and Caskey, A. (2007). Satisfaction with food services: insight from a college cafeteria. *Journal of Foodservice Business Research*, 10(2):51-65.
2. Akbara, A.Z., Chua B-L., Han, H., & Raposo, A. (2021). Investigating International Students' Perception of Foodservice Attributes in Malaysian Research Universities. *Sustainability*, 13(15):8190. <https://doi.org/10.3390/su13158190>.
3. Chang, D.M-L., & Suki, N.M. (2018). Students' Satisfaction of Food Services at the University Cafeteria: a Comparative Study Via PLS Approach. *International Journal of Engineering & Technology*, 7(3.21), 61-66.
4. Food-Based Dietary Guidelines For Jamaica (2017) Ministry of Health Jamaica.
5. Garg Anshul and Kumar Jeetesh (2017). Exploring customer satisfaction with university cafeteria food services. An empirical study of Temptation Restaurant at Taylor's University, Malaysia. <https://doi.org/10.1515/ejthr-2017-0009>.
6. Garg, A., & Kumar, J. (2017). Exploring customer satisfaction with university cafeteria food services. An empirical study of Temptation Restaurant at Taylor's University, Malaysia.

- European Journal of Tourism, Hospitality and Recreation*, 8(2), 96-106. <https://doi.org/10.1515/ejthr-2017-0009>.
7. Gassenheimer, J. E., Davis J. C., and Dahlstrom R. 1998. Is dependent what we want to be? effects of incongruency. *Journal of Retailing* 74(2): 247-272.
 8. Johns, N. and Lee-Ross, D. 1995. Profile Accumulation: a quality assessment technique for hospitality SMEs, in Teare, Armistead, C (Eds), *Services Management, New Directions, New Perspectives*, Cassell, London.
 9. Kesten, D. (1997). *Native American: the vision quest fast*. In *Feeding the Body, Nourishing the Soul* (pp. 1121-1134). Berkeley, CA: Conari Press.
 10. Lugosi, P. (2019) Campus foodservice experiences and student wellbeing: An integrative review for design and service interventions. *International Journal of Hospitality Management*, DOI: 10.1016/j.ijhm.2018.10.019.
 11. Martin, J., Sneed, J., and White, G. 1992. School food service in the year 2000 and beyond. *School Food Service Research Review* 16(2):101-106.
 12. Mensah, I., & Mensah, R. D. (2018). Effects of service quality and customer satisfaction on repurchase intention in restaurants on University of Cape Coast campus. *Journal of Tourism, Heritage & Services Marketing*, 4(2), 27-36. <https://doi.org/10.5281/zenodo.1247542>.
 13. Nadzirah, S., Ab Karim, S., Ghazali, H. and Othman, M. (2013). University foodservice: An overview of factors influencing the customers' dining choice. *International Food Research Journal* 20(3): 1459-1468. Journal homepage: <http://www.ifrj.upm.edu.my>.
 14. Oliver, Richard L. (1996). *Satisfaction: A Behavioral Perspective on the Consumer*. McGraw-Hill, New York.
 15. Petrescu, D. C., Vermeir, I., & Petrescu-Mag, R. M. (2020). Consumer understanding of food quality, healthiness, and environmental impact: A cross-national perspective. *International journal of environmental research and public health*, 17(1), 169. <https://doi.org/10.3390/ijerph17010169>.
 16. Peyton, R., Pitts, S., Kamery, R.H., (2003)- "*Consumer Satisfaction/Dissatisfaction: a review of the literature prior to the 1990's*", *Proceedings of the Academy of Organizational Culture, Communication and Conflict*. Vol. 7(2).
 17. Ruetzler, T. M. and Meyer, M. K. 2005. Culture and service quality perceptions: Development of a university foodservice survey. Mississippi, United States of America: The University of Southern Mississippi, Ph.D. dissertation.
 18. Ryu, K., & Han, H. (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. DOI: 10.1177/1096348009350624.
 19. Ryu, K., & Han, H. (2011). New or repeat customers: How does the physical environment influence their restaurant experience? *International Journal of Hospitality Management*, 30(3), 599-611. doi:10.1016/j.ijhm.2010.11.004.
 20. 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*. DOI: 10.1108/09596111211206141.
21. Serhan, M., & Serhan, C. (2019). The impact of foodservice attributes on customer satisfaction in a rural university campus environment. *International journal of food science, 2019*. <https://doi.org/10.1155/2019/2154548>.
 22. Smith, R. A., White-McNeil, A., & Ali, F. (2020). Students' perceptions and behavior toward on-campus foodservice operations. *International Hospitality Review*. DOI 10.1108/IHR-06-2019-0010.
 23. Tardi Carla, Estevez Eric (2020) Rational Expectations Theory. Investopedia. Economics Macroeconomics. <https://www.investopedia.com/terms/r/rationaltheoryofexpectations.asp>.
 24. Thomas, D. (2015). Quality of Vegetarian Cafeteria Services and Students' Overall Satisfaction with their University. *International Forum Journal, 18*(1), 81-96. Retrieved from <https://journals.aiias.edu/info/article/view/122>. <https://doi.org/10.1080/16070658.2017.1267348>.
 25. U.S. Department of Health and Human Services. (2001). Overweight and obesity as public health problems in America. In *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity* (pp. 18-19). Rockville, MD: Public Health Service, Office of the Surgeon General.

Appendix A

Cafeteria Research Questionnaire

Section A

Instructions: Put a check in the right box that corresponds to your demographic characteristics.

1. Gender

- Male
- Female

2. Age

- 17-24
- 25-32
- 33-40
- 41-48
- 49-56
- above 57

3. Occupation/status

- Student
- Faculty
- Staff

4. Education:

- Freshman
- Sophomore
- Junior
- Senior
- Masters
- Doctorate
- Associate Degree
- Others (please specify) _____

5. Ethnicity (Where are you from?)

- Jamaican
- Asian
- African
- European

- American
- Other Caribbean Countries Please specify -----

6. How often do you eat in the Cafeteria?

- Daily
- 2-3 times/week
- 2-3 times/month
- Rarely (once a week/month)
- Never

7. Dining in Cafeteria

- Alone
- With Friend
- With Colleagues
- take away

8. Have you ever gone to another place for lunch instead of SDA educational institution (pseudo name)?

- Daily
- 2-3 times/week
- 2-3 times/month
- Rarely (once a week/month)
- Never

9. If your answer to number 8 is yes, what is the reason?

- Menu Diversity
- Food Quality
- Other Reasons (please specify): _____

10. What is your food preference?

- Vegetarian
- Non vegetarian
- others (please specify)_____

Section B

Instructions: Put a check (√)-to indicate your satisfaction or dissatisfaction with the items

Items	Items	Very Unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied
Food quality	Taste					
	Menu items					
	Freshness					
	Variety					
	Quality of food					
	Appearance					
	Portion size					
	Shape					
	Color					
	Texture					
	Temperature of food served					
Environment	Clean floor and wall					
	Clean table and chair					
	Tray return area					
	Comfortable seating and dining area					
	Seating capacity					
	Ambience					
	Hygiene facilities					
Management	Waiting time for food to be served					
	Politeness of cafeteria staff					
	Employee appearance					
	Alertness of Cafeteria staff					

	Customer service					
	On-time delivery of food to serving line					
	Price of food items					

Section C

Instructions:

Please check (√) the availability of the listed items in the SDA Educational Institution's (pseudo name) Cafeteria menu

Food items	Not available	Rarely available	Available most of the times	Available everyday
Variety of Fruits				
Variety of Whole grains				
Variety of vegetables (dark green, red, yellow etc.)				
Non-fried vegetables				
Cereals				
Nuts				
Legumes				
Beans				
Brown rice				
White rice				
Brown Bread				
White Bread				
100% Fruit juices				
Unsweetened beverages				
Sweetened beverages				
Sodas				
Fat free cow's milk				
Low fat cow's milk				
Soy beverages				
Yogurt				
Vegetable Oils				
Olive oil				
Pastries				
High sugar foods				
Refined grains				
Tin cheese				
Vegetarian cheese				
Cheddar cheese				
Gouda cheese				

Section D

Food preparation Methods

Put a check (✓)-to indicate your satisfaction or dissatisfaction with the items below:

FOOD ITEMS	Very Unsatisfied	Unsatisfied	Neutral	Satisfied	Very Satisfied
Food prepared with a lot of oil					
Food prepared with a lot of salt					
Food prepared with very Hot spices					
Food prepared with a lot of cheese					
Fried food					

Section E

Kindly rank the items below from each category beginning with the most important item that should be improved (to be number 1) to the least important item to be improved (to be number 4) at Cafeteria.

Food

- _____ Menu variety
- _____ Menu attractiveness
- _____ Food display
- _____ Food portion

Facility

- _____ Equipment (music, WIFI)
- _____ Food layout
- _____ Bathrooms
- _____ Hand washing sinks

Environment

- _____ Attractive
- _____ Clean environment
- _____ Sitting capacity
- _____ Cafeteria location

Personnel/employee

- _____ Personnel Training
- _____ Politeness of employees
- _____ Alertness of employees
- _____ Customer service

Service

- _____ Service quality
- _____ Ordering process
- _____ Price to be reduced
- _____ Reduce time to wait for food