The Impact of Canteen Services on Students' Satisfaction: A Case Study Based on a University in Sri Lanka

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Abstract

This research paper examines the impact of canteen services on students' satisfaction, focusing on a case study conducted at a Sri Lankan university. By addressing a gap in the existing knowledge, particularly in the Sri Lankan context regarding the relationship between canteen services and student satisfaction, this research aims to determine the impact of four vital factors on students' satisfaction: food variety, food quality, service quality, and price fairness. An online survey was conducted among 374 undergraduate students at a Sri Lankan university to collect data for this quantitative research which were analyzed using the SPSS. The findings revealed that food quality, service quality, and price fairness had a significant impact on students' satisfaction while food variety had no impact on students' satisfaction. These results indicated that a greater level of food quality positively influenced student satisfaction, as did a higher level of service quality, and price fairness. Findings emphasize the importance of considering these factors in enhancing canteen services to meet students' expectations and improve their overall university experience. The study provides valuable insights for university management in developing effective strategies to enhance the quality of canteen services and align them with students' expectations.

Keywords: Canteen services, Students' satisfaction, Food variety, Food quality, Service quality, Price fairness

1. Introduction

A university canteen is where students fulfil their basic needs and wants during their time at university, playing an essential role in terms of the students' diet and nutrition. As stated by Kwun et al. (2013), the university canteen plays a crucial role in shaping a student's overall university experience by catering to a diverse student body encompassing various age groups, nationalities, races, life experiences, and socio-economic backgrounds. Due to the current global market, students are increasingly seeking admission to universities for higher education and as a result, the number of student enrollments in universities is rising steadily (Garg, 2014). While the importance of delivering high-quality education is unquestionable for numerous universities which are aiming to attract more undergraduate students; focusing on food services also adds an extra dimension of appeal for prospective students. In such a context, university administrators have begun recognizing the significance of offering comprehensive services on campus, including food services that cater to students' diverse tastes and preferences, as a means of attracting as well as retaining them amidst a competitive landscape (Garg & Kumar, 2017).

The quality of food services delivered by university canteens is a critical factor in meeting students' expectations. Research by Saglik et al. (2014) has highlighted the prominence of service quality in satisfying students' needs and expectations in the competitive market. Additionally, aspects such as food taste, price, nutrition, operating hours, comfort, assortment, convenience, quality, and price and value fairness have been identified as significant components influencing food selection and satisfaction among adults. Multiple research (Deshpande et al., 2009; Meyer & Conklin, 1998; Woo et al., 2009 as cited in Garg & Kumar, 2017) has reported that the evaluations of these factors can help university canteens improve their services and provide enhanced dining experiences.

Although several studies have examined food services and customer satisfaction, there is still a gap in the body of knowledge in the Sri Lankan context and therefore, this study in one aspect is intended in helping to fill up this geographic gap.

Moreover, the selected university for this research stands out in the Sri Lankan higher education landscape as the only institution that is state-owned yet funded through private means. Notably, the university hosts a substantial student body consisting of both local and international students, offering researchers an ample and diverse sample to study the intricacies of student behavior and satisfaction with canteen services. Focusing on this specific university allows the research to delve into these

nuanced aspects of student satisfaction, filling a crucial practical gap as well as a geographical gap in the existing literature.

To comprehensively understand the impact of canteen services on students' satisfaction, several research questions have been formulated as follows.

- Does the food variety positively impact students' satisfaction?
- Does the food quality positively impact students' satisfaction?
- Does the service quality positively impact students' satisfaction?
- Does the price fairness positively impact students' satisfaction?

Above are the research questions that are aimed to be addressed by the research objectives of this study. Thus, the general objective of the study is to determine the impact of canteen services on students' satisfaction. The specific objectives include,

1. To determine the impact of food variety on students' satisfaction
2. To determine the impact of food quality on students' satisfaction
3. To determine the impact of service quality on students' satisfaction
4. To determine the impact of price fairness on students' satisfaction

By achieving these objectives, the study focuses on bringing valuable insights into improving canteen services based on student feedback.

This research paper presents a case study conducted at a Sri Lankan university canteen, where the impact of canteen services on students' satisfaction will be investigated. The insights gained from this study will not only contribute to the broader understanding of canteen services in the Sri Lankan context but will also enable the university management to develop effective strategies to enhance the quality of canteen services through identifying the key factors influencing students' satisfaction. Ultimately, the findings of the research will help in creating an environment that aligns with the students' expectations, improving the overall students' satisfaction and enriching their university experience.

2. Literature Review

Almost in every large-scale institute for example universities, schools, nursing homes, care centers, hospitals and even in prisons, canteen food service can be found. As for universities, due to the constant increase in student enrolments for tertiary education, on-campus canteens have become an essential part of the university premises to provide food services to students. Further, the increased demand for canteens has put a substantial amount of pressure on their operations to satisfy students' expectations

and needs for food services (Saglik et al., 2014). Student satisfaction or in other words customer satisfaction can be identified as the client's response to the fulfilment of his expectations of the service and whether he perceives that the consumption has fulfilled his requirements. In contrast, customer dissatisfaction could occur when there is a gap between the client's expectations and actual performance (Chang & Suki, 2018). Ng (2005) reviewed several studies and has identified that factors such as the quality of food, value, quality of service, price, food variety, hygiene and cleanliness, ambience, and staff can influence customer satisfaction at a canteen. The current study investigates the factors, food variety, food quality, service quality, and price fairness concerning their impact on student satisfaction.

2.1 Customer Satisfaction

Customer satisfaction has long been a topic many scholars have studied within the field of marketing. Whereas practitioners in this field have widely employed customer satisfaction as a guiding measure to design their offerings, emphasizing its significance. Further underscoring the importance of customer satisfaction, The American Customer Satisfaction Index (ACSI) developed by the University of Michigan tracks customer perceptions of 200 establishments across different sectors (Fornell et al., 1996). According to Oliver's definition, customer satisfaction is characterized as the consumer's fulfillment response which reflects their judgment of the pleasurable level or contentment derived from a product or service (Oliver, 1997).

Being a critical determinant of customer loyalty, repeat purchase intentions, and ultimately, profitability, it stands as a cornerstone of any business' success. Especially, the ability to consistently meet the expectations of customers, or in other words to achieve customer satisfaction is vital for businesses such as restaurants as it directly influences customers' decision making between the available alternatives. Noted by Amelia & Garg (2016), along with the first impression, food quality, order accuracy, service efficiency, and the demeanor of restaurant staff was all part of the overall customer satisfaction. Apart from those, factors such as brand familiarity, loyalty, comfortable seating and restaurant ambiance are also associated with customer satisfaction as contended customers showcased tendency to revisit the places (Paswan, Spears, & Ganesh, 2007; Tam, 2008; Qin & Prybutok, 2009, as cited in Garg & Kumar, 2017).

Likewise, students' satisfaction in university canteens where students represent the majority of institutional foodservice users, is also becoming substantially important

in the current context. And this also heavily depends on factors such as food quality, variety, price fairness, and value for money (Ng, 2005; Xi & Shuai, 2009).

Interestingly, there are several theories that a researcher could use to measure customer satisfaction in many aspects. One of them being Expectancy-Disconfirmation Theory where it suggests that customer satisfaction is determined by the comparison of expectations with perceived performance and if the perceived performance meets or exceeds expectations, customers are satisfied; otherwise, dissatisfaction occurs. In the context of university canteen services, students' satisfaction can be influenced by their preconceived expectations regarding food quality, variety, service, and price fairness. Understanding how these expectations align with their actual experiences can provide insights into satisfaction levels (Hung & Wong, 2007). Another theory known as Zone of Tolerance implies customers to have a range of acceptable service quality. As long as service quality falls within this zone, customers are satisfied but deviations beyond this zone result in dissatisfaction. Analyzing the zone of tolerance in the context of canteen services can assist in identifying the acceptable range for factors like food quality, service quality, and pricing that align with students' satisfaction.

Nonetheless, through recent research, the relationship between food quality attributes and customer satisfaction has proven to be statistically significant (Rozekhi et al., 2016). Customer satisfaction is often considered a fundamental measure of both outcome and quality. If customers are not provided an overall satisfactory offering, it was observed that the dissatisfied customers are more likely to voice their concerns or seek redress to alleviate cognitive dissonance and negative dining experiences (Oliver, 1987; Nyer, 1999; Gupta and Zeithaml, 2005, as cited in Andaleeb & Caskey, 2007).

In university context, student dissatisfaction with food services could lead to them switch to other alternative arrangements while in extreme cases, reconsidering their choice of institution could also be a consequence. With numerous studies showing a significant positive correlation between satisfaction and loyalty, a strong connection between the two constructs has been identified (Szymanski & Henard, 2001). Jones & Sasser (1995) argue that, due to the fact that consumer's conduct depends on their unique attributions which is also reflected on the customer satisfaction, this positive correlation might still not be a simple linear relationship.

2.2 Food Variety

Food variety or the availability of several food and beverage options for the students to choose from could influence student satisfaction positively. For instance, when they have a variety of food to satisfy their needs and expectations, the degree to which they become uninterested in a particular food type is much less since they have the capability to switch to different options. Further, students' preferences are rather diverse and therefore the ability to explore new flavours would enhance their satisfaction (Smith et al., 2020). According to a study by Xi & Shuai (2009), food variety significantly influences student satisfaction, and they have stated that food variety is very important and monotonous or inadequate variety of food can lead to students' dissatisfaction. However, the results of recent research by Imran (2018) have shown an insignificant relationship between food variety and students' satisfaction which is inconsistent with most of the previous literature. Nevertheless, the research of Ryu et al. (2008), believes that customer satisfaction is predicted by the variable food variety. Thus, the hypothesis for the current study is formulated as follows:

H1: There is an impact of food variety on students' satisfaction

H0: There is no impact of food variety on students' satisfaction

2.3 Food Quality

Various studies have demonstrated food quality as a highly important factor in determining student satisfaction with food services at universities. The studies by Imram (1999) and Ng (2005) as cited by Smith et al. (2020) have identified, flavour, shape, aroma, colour, texture, taste, freshness, temperature, gloss, smell, consistency and appearance as attributes of overall food quality which are vital aspects in reaching customer satisfaction or even exceeding the expectations and intension to revisit than other variables such as price, hygiene and cleanliness, value, convenience, etc. According to Oh (2000); Imran (2018) and Smith et al. (2020), there is a high positive correlation between food quality and customer satisfaction as well as repeat purchase behaviour of them. Andaleeb and Caskey (2007) concluded that most of the students would prefer visiting the on-campus canteen regularly if the food quality is improved rather than spending their money on off-campus food services. Thus, the hypothesis for the current study is formulated as follows:

H2: There is an impact of food quality on students' satisfaction

H0: There is no impact of food quality on students' satisfaction

2.4 Service Quality

Service quality is described by Abo-Baker (2004) as the ability of the organization to satisfy customers according to the determined characteristics, specifications and service requirements that achieve customer needs and desires more than they expected. Ng (2005) discovered that service quality is a factor which comes after food quality in determining students' satisfaction with food services. According to Pettijohn et al. (1997), attributes of service quality consist of the level of service, friendly treatment, staff attentiveness, employees' appearance, and knowledge of food items. Service quality can be studied by comparing the expectations of the customer and how he/ she perceived the service received. Therefore, the quality of service depends on the customer's perception, which also varies from person to person. A study by Andaleeb & Caskey (2007) states the expectations and perceptions of students on service quality differ from one student to another. That being the case, the variation results in difficulty in measuring and identifying the determinants of service quality. Hence, many scholars have attempted to create different measurement tools such as SERVQUAL instrument, LODGSEV instrument, etc. to evaluate service quality. However, Oliver (1997) believes that service quality is an antecedent of customer satisfaction and the findings of El-Said & Fathy (2015) confirm this. Thus, the hypothesis for the current study is formulated as follows:

H3: There is an impact of service quality on students' satisfaction

H0: There is no impact of service quality on students' satisfaction

2.5 Price Fairness

Price serves as a form of compensation given in return for fulfilling a customer's needs. The alignment between price and the perceived desires of consumers is paramount. Determining the right price for a product or service can be a complex task as it hinges on the fundamental values attributed to the available offerings. Essentially, the price tag is the leading element that guides customers in estimating the worth of a product or service which makes it a key determinant of their decision-making process (Mohsan et al., 2011).

Price fairness is achieved when the perception of an overall value of a product is reciprocal with the price paid in return. Many researchers seem to believe that price is one of the fundamental factors controlling customer satisfaction and ultimately influencing the positive behavioural intentions of customers. A study by Othman et al. (2013) indicated price to be the first concern of most students regarding food

services since they have a limited budget when it comes to purchasing meals. Furthermore, they stated that the students choose to go for cheaper options outside the campus if the on-campus food services are too expensive. Receiving the right value and reasonable amount of quantity for the money they paid is also identified as an important factor which encourages customers to return to the canteen. Moreover, Soriano (2003) claimed that customers expect the quality of the food to be worth the price they pay and the more they pay, the more their quality expectations will be. Therefore, price is equally important as other determinants of customer satisfaction. Hence it can be concluded that price fairness has a significant impact on student satisfaction (El-Said & Fathy, 2015; Xi & Shuai, 2009). Thus, the hypothesis for the current study is formulated as follows:

H4: There is an impact of price fairness on students' satisfaction

H0: There is no impact of price fairness on students' satisfaction

2.6 Conceptual Framework

The conceptual framework of the study is illustrated in the figure below based on the literature review.
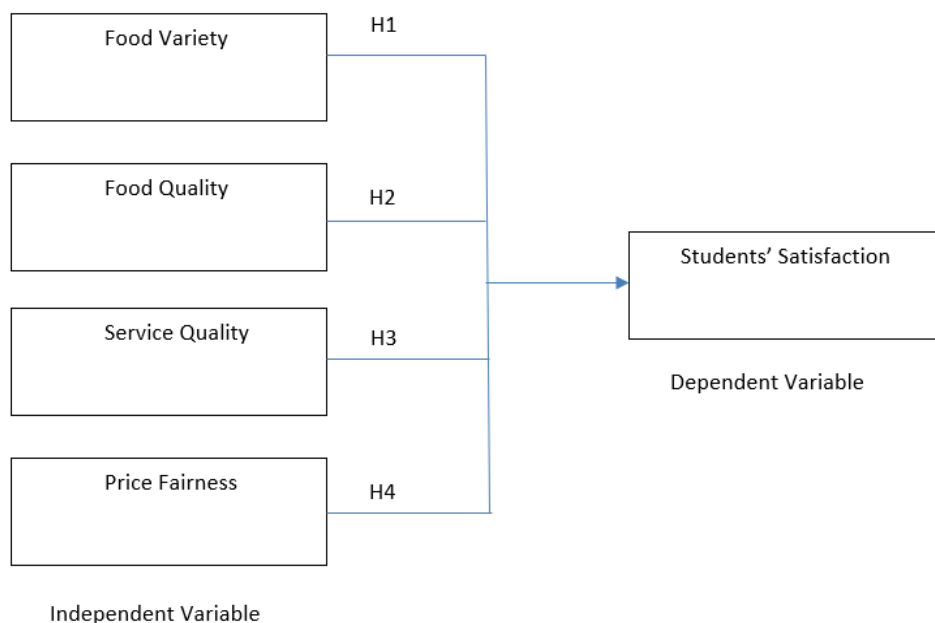
Figure 1: Conceptual Framework

3. Methodology

This research employed a quantitative research strategy to study the impact of canteen services on students' satisfaction. An online survey through a Google form was used to gather data to empirically test the hypotheses proposed in this research.

The population for this study comprised undergraduate students enrolled in the first, second, third, and fourth years at the university, which was over 13,000 students in total as of May 2023. Given the large population size, convenience sampling was used to select participants for the survey.

The questionnaire designed to collect data comprised 3 main segments. The first part consisted of questions to collect the demographic and individual characteristics of the sample. The second part included 21 total statements to measure the variables as in 4 items for food variety, another 4 items for food quality, 5 items for service quality, 3 items for price fairness and 5 items for customer satisfaction which is the dependent variable of the framework. A 5-point Likert scale where respondents can specify their level of agreement or disagreement with each statement as 5 = strongly agree, 4 = Agree, 3 = neither agree nor disagree, 2 = disagree and 1 = strongly disagree is used here.

The data was analyzed using the Statistical Package for the Social Sciences (SPSS) Statistics 26. To achieve the study's objective, various statistical tests were employed such as frequency calculations, reliability tests, Pearson correlation and regression tests. The frequencies were initially calculated to analyze the demographic and behavioural traits of the respondents. This helped provide a better understanding of the participants' backgrounds. The Pearson correlation coefficients were calculated to determine whether significant relationships existed between the variables. And lastly, the hypotheses were tested using regression analysis.

4. Results Analysis

The online survey distributed among the students collected 374 responses and the sample contained 57% female and 43% male respondents where the majority (51%) of them are of age 20 – 21 and 29% are between 22 – 23 while there are only 14% of 17 – 19-year-olds and 6% of those who are 24 and above. The data we collected showed that almost 2/3 (64%) of the students visit canteens on a daily basis while 24% of them visit canteens 2-3 times per week and the rest 12% of the students visit canteens only a few times per month or the whole semester.

To analyse the data collected, we did the reliability analysis, correlation analysis and then regression analysis to test the hypotheses we built. The following are the results obtained.

4.1 Reliability Analysis

The reliability of the variables was tested using Cronbach's alpha value (alpha > 0.7) to check the internal consistency of the questionnaire and our SPSS survey results showed Cronbach's alpha values as in Table 1.

Table 1: Results of the reliability analysis from SPSS

The Variable	Cronbach's Alpha	Reliability	Conclusion
Food Variety	0.758	0.758 > 0.7	Reliable
Food Quality	0.873	0.873 > 0.7	Reliable
Service Quality	0.878	0.878 > 0.7	Reliable
Price Fairness	0.872	0.872 > 0.7	Reliable
Students' satisfaction	0.918	0.918 > 0.7	Reliable

Since all the variables including the dependent variable had a Cronbach's Alpha value of more than 0.7, we could conclude that all the items measuring each variable are internally consistent and therefore reliable.

4.2 Correlation Analysis

For figuring out the relationship between two variables of the hypotheses, we did a correlation analysis using the Pearson correlation test.

Table 2: Results of correlation analysis from SPSS

Dependent Variable	Independent Variable	Pearson Correlation	Significance of the Relationship
	Food Variety	0.617	0.000

Students' satisfaction	Food Quality	0.778	0.000
	Service Quality	0.650	0.000
	Price Fairness	0.674	0.000

As per Table 2, the Pearson correlation between food variety and students' satisfaction is 0.617 (61%), implying a moderate positive linear relationship between them. The Pearson correlation is 0.778 (77%) between food quality and students' satisfaction which indicates a strong positive linear relationship between them. Likewise, there is a 0.650 (65%) Pearson correlation between service quality and students' satisfaction. This also suggests a moderate positive linear relationship between the two variables. Similarly, according to the Pearson correlation coefficient between price fairness and students' satisfaction which is 0.674 (67%), a moderate positive linear relationship appeared to be there as well.

Accordingly, the Pearson values of all variables are positive, which means that there is a positive relationship between each independent variable and the dependent variable. It says that, when an independent variable is increased students', satisfaction can also be increased. Referring to the Sig. value (2-tailed) of 0.000 (P-value < 0.05), we can conclude that there is a statistically significant correlation between each independent variable and the dependent variable, students' satisfaction.

4.3 Regression Analysis

To explore whether the four independent variables predict or cause the dependent variable of students' satisfaction, we conducted the multiple linear regression analysis as shown below.

4.3.1 Summary of Regression

Table 3: Summary of regression from SPSS

Model Summary	
R	0.836
R-square	0.699
Adjusted R-square	0.696

Model Significance	0.000

The model predicts students' satisfaction; R represents the correlation between predicted and observed students' satisfaction. In this study, as cited in Table 3, R = 0.836 and this being a very high correlation, we could say that our model predicts students' satisfaction rather precisely.

R square is simply the square of R which indicates the proportion of variance in students' satisfaction that can be explained by our four predictors namely food variety, food quality, service quality and price fairness. The model fit will be increased when the R-square is high.

Here, having an R-square of 0.699 shows a higher model fit since the value is greater than 0.5. This means that 69% of the students' satisfaction (dependent variable) is explained or impacted by all four independent variables together. The contribution of additional input variables to the model is explained by the adjusted R-square. As per the adjusted R-square of this model, which is 0.696, the productive power is expected to be decreased when a new variable is added to this.

The model significance shown in the ANOVA Table (Appendix) is 0.000 and that is less than 0.05. Hence, suggests the overall model is significant.

4.3.2 Hypothesis Testing
Table 4: Results of Regression Analysis from SPSS

Hypothesis Testing	Beta Coefficient	Significance	Accept/ Reject
H1: There is an impact of food variety on students' satisfaction.	0.082	0.066	Reject (since P-value > 0.05)
H2: There is an impact of food quality on students' satisfaction.	0.411	0.000	Accept
H3: There is an impact of service quality on students' satisfaction.	0.212	0.000	Accept
H4: There is an impact of price fairness on students' satisfaction.	0.262	0.000	Accept

The main constructs that are being tested in this model are food variety, food quality, service quality and price fairness as shown in the subsequent regression model where students' satisfaction is the dependent variable. Thus:

Students' Satisfaction = a + (b1 × Food Variety) + (b2 × Food Quality) + (b3 × Service Quality) + (b4 × Price Fairness) + error

[a = constant]

Given only the scores of the predictors; we can predict students' satisfaction by computing the regression model equation as follows.

Students' satisfaction = 0.091 + (0.074 × Food Variety) + (0.428 × Food Quality) + (0.198 × Service Quality) + (0.285 × Price Fairness) + error

Based upon empirical results in Table 4, we examined the hypotheses for the relationships built in the conceptual framework of this study and a hypothesis was accepted when the P-value was less than 0.05 (i.e. $p \leq 0.05$), using a two-tailed test. The results supported three hypotheses and one was rejected.

According to the results of regression analysis for food variety, the relationship was weak and non-significant since its p-value was greater than 0.05 ($\beta = 0.082$, $p = 0.066$). Therefore, H1 was rejected and its null hypothesis (H0) was accepted. Hence there is no impact of food variety on students' satisfaction with canteen services. However, the results suggested a significant and positive impact of food quality on students' satisfaction ($\beta = 0.411$, $p = 0.000$), supporting H2. Similarly, the analysis supports H3, a significant and positive impact of service quality on students' satisfaction ($\beta = 0.212$, $p = 0.000$). The impact of price fairness on students' satisfaction was also found significant and positive ($\beta = 0.262$, $p = 0.000$), thereby supporting H4.

Among all four variables, food quality is considered the most impactful factor which could influence on students' satisfaction as its beta coefficient is 0.411, explaining that there is a 41% impact from food quality on students' satisfaction with canteen services. This is a positive relationship as described and therefore if food quality increases by 1% in canteen services, students' satisfaction can also be increased by 41%. Further, 26% of students' satisfaction can be increased if 1% of service quality was elevated whereas 21% of students' satisfaction can be increased by raising the price fairness by 1% of canteen services in the university.

Thus, we could arrive at 2 main conclusions through this research. One is that the highest contributing factor to the students' satisfaction is "Food Quality", which is 41% while the second and third most contributing factors are "Service Quality" and "Price Fairness", which are 26% and 21% respectively. Food Variety is not identified

as a factor that is contributing to the students' satisfaction in this study context. However, overall, it is a significant model to predict "Students' satisfaction" and therefore is accepted as a model.

5. Discussion

Followed by the analysis of the results, three hypotheses of the study were supported while one was rejected, revealing important insights into the determinants of student satisfaction.

Regarding food variety (H1), the findings indicated that there was no significant impact on students' satisfaction ($\beta = 0.082$, $p = 0.066$). This implies that the availability of a diverse range of food options did not strongly influence students' overall satisfaction with canteen services. These findings are in coherence with the study (Imran, 2018) where food variety was found to be an insignificant factor in students' satisfaction. Although, most of the previous studies (Ryu et al., 2008; Smith et al., 2020; Xi & Shuai, 2009) have highlighted the importance of food variety in enhancing customer satisfaction while the current findings suggest that the other factors may have a more substantial impact on student satisfaction within the university context. According to Baiomy et al. (2019), satisfaction can be predicted by the number of menu options. It is worth considering that students' preferences and expectations may vary, and factors such as food quality and service quality may outweigh the importance of food variety in this specific setting.

On the other hand, the analysis demonstrated a significant and positive impact of both food quality (H2) and service quality (H3) on students' satisfaction supporting the hypotheses that higher levels of food quality ($\beta = 0.411$, $p = 0.000$) and service quality ($\beta = 0.212$, $p = 0.000$) are associated with increased student satisfaction. These findings align with previous research emphasizing the significance of food quality in determining customer satisfaction (Andaleeb & Caskey, 2007; Imram, 1999; Ng, 2005; Oh, 2000; Smith et al., 2020). As in, Ng (2005) said that overall food quality determinants (taste, freshness, and appearance) are more important than other considerations like price, value, convenience, and cleanliness in achieving or surpassing consumer satisfaction and intent to return. Andaleeb and Caskey (2007) found that most students would rather interact with on-campus foodservices more regularly if food and beverage quality were to improve. As supporting the idea that customer pleasure is a function of service quality (Abo-Baker, 2004; El-Said & Fathy, 2015; Ng, 2005; Oliver, 1997). According to El-Said and Fathy (2015), foodservice is a crucial part of overall planning that influences campus life quality. Galabo (2019)

showing that customers' satisfaction in a university canteen was affected mostly on the quality of meals, diversity of food, food hygiene and environment. According to the above research, it shows that there is a significant impact of both food quality (H2) and service quality (H3) on students' satisfaction.

Moreover, price fairness (H4) was also found to have a significant and positive impact on students' satisfaction (β = 0.262, p = 0.000). This suggests that students perceive the fairness of pricing as an important determinant of their satisfaction with canteen services validating the existing work (El-Said & Fathy, 2015; Xi & Shuai, 2009). Students with limited budgets prioritize price considerations when making choices about on-campus or off-campus food options (Othman et al., 2013). The findings point out the need for canteen operators to establish reasonable and transparent pricing structures that align with students' expectations and provide perceived value for money (Soriano, 2003). According to (Nadzirah et al., 2013), students carefully examine prices when purchasing food due to limited cash in hand. 3In order to ensure long-term viability, (Chang et al., 2014) also recommended that the university canteens take considerable steps to improve the price and quality of the food. Above mentioned articles support with this article results and that shows there is a significant impact of food price (H4) on students' satisfaction.

6. Limitations and Further Studies

While this research on the impact of canteen services on student satisfaction at a Sri Lankan university has shed light on important aspects, it is crucial to acknowledge the limitations encountered during the study and identify potential avenues for future research.

To begin with, the focus of this study was constrained to only four independent variables which limit the insights and recommendations only to those four factors, although students' satisfaction could be impacted by several other factors. Including a diverse range of variables such as staff performance, ambience, dietary restrictions, responsiveness, environmental sustainability practices and cultural preferences, in future research would provide a broader perspective and insights into the research.

To advance the field, it is recommended that a mixed method approach is employed by combining quantitative and qualitative data, which would provide a more comprehensive understanding of student satisfaction and capture rather subtle factors influencing their experiences. This would also help dive deep into the reasons behind

the non-significant relationship found between the food variety and the students' satisfaction or if it is indirectly connected to students' satisfaction.

Addressing these limitations and pursuing future research along these lines could contribute to a much more comprehensive understanding of the impact of canteen services on students' satisfaction and recommend more strategies to enhance the overall student experience.

7. Conclusion

In essence, this research paper aimed to investigate the impact of canteen services on students' satisfaction, with a focus on a case study conducted at a Sri Lankan university. The findings of this study provide valuable insights into the relationship between canteen services and student satisfaction, particularly in the Sri Lankan context.

The results revealed that the factors food quality, service quality, and price fairness had a significant impact on students' satisfaction. These findings align with previous research that emphasizes the importance of these factors in shaping students' perceptions and overall satisfaction with canteen services. It highlights the crucial role played by food quality, service quality, and price fairness in meeting students' expectations and enhancing their university experience.

Interestingly, the factor of food variety was found to have no significance or impact on students' satisfaction in this particular study which is consistent with the findings of a recent research. However, these findings may seem contradictory to the majority of the previously conducted research that concluded a wide variety of food options positively influences student satisfaction. Nevertheless, it is essential to acknowledge that the data were taken from the specific context of a Sri Lankan university. Further research is recommended to explore these conflicting results and understand the potential reasons behind it.

The implications of these findings are significant for university administrators and canteen management. By prioritizing and investing in food quality, service quality, and price fairness, universities can enhance student satisfaction and create an environment that promotes positive student experiences.

To enhance canteen services and address the identified factors, university management should consider several key recommendations. First, maintaining high food quality standards is essential to meet student expectations. Implementing quality

control measures, sourcing ingredients from reputable suppliers, and ensuring proper food preparation and storage practices are vital steps in this regard.

Second, improving service quality involves training canteen staff to provide efficient, friendly, and attentive service to students. Enhancing staff knowledge about the menu, promoting good hygiene practices, and implementing effective queuing systems can contribute to a positive dining experience. Lastly, ensuring price fairness is crucial to avoid any perception of exploitation. Regular price evaluations, benchmarking against competitors, and transparent pricing structures can help instil confidence in students that they are receiving fair value for their money.

Apart from the above major suggestions, another proactive approach could be to establish a feedback mechanism that allows continuous evaluation and improvement of their services. This feedback loop will help address issues promptly and ensure that the offerings align with student preferences and expectations. Additionally, students should be actively encouraged to utilize the school canteen and provide constructive feedback to the canteen management and staff. Their insights can be invaluable in driving positive changes. To facilitate this, appointing student leaders who can represent their peers and convey feedback during management committee meetings is crucial. These student representatives can act as a bridge between the student body and the canteen management, ensuring that the students' voices are heard, and their concerns are addressed effectively. By implementing these, the canteen services can be tailored to meet the specific needs and preferences of the students. Thus, it ultimately leads to a higher level of satisfaction and a more enjoyable dining experience for all.

It is also important to acknowledge the limitations of this study as the research was conducted focusing basically on four independent variables which limit the scope of the findings and recommendations only to those four factors. Thus, including a diverse range of variables as well as using mixed research approaches by combining quantitative and qualitative data in future research could bring more insights to the existing body of knowledge.

Enhancing canteen services not only improves student satisfaction but also contributes to overall student well-being, academic performance, and university reputation. By implementing the recommendations outlined in this study, universities can take proactive steps towards creating a supportive and satisfying environment for their students.

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APPENDICES

Appendix A: ANOVA Table

Coefficients[a]							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	.091	.107		.850	.396	-.119	.301
Food_Variety	.082	.044	.074	1.843	.066	-.005	.169
Food_Quality	.411	.045	.428	9.096	.000	.322	.500
Service_Quality	.212	.041	.198	5.179	.000	.131	.292
Price_Fairness	.262	.034	.285	7.692	.000	.195	.328
a. Dependent Variable: Customer_Satisfaction							

Appendix B: Survey Questionnaire

Demographic information

Your Gender?
- Male
- Female

Your Age?
- 17-19
- 20-21
- 22-23
- 24 and above

Your Academic year?

- 1st year
- 2nd year
- 3rd year
- 4th year

Your Faculty?
- Faculty of Business
- Faculty of Computing
- Faculty of Engineering
- Faculty of Science

How often do you use cafeteria services?
- Daily
- 2-3 times per week
- Few times per month
- Few times per semester

Likert Scale Questions

The following questions support the variable analysis of the research. Please select the most suitable answer according to your concern.

Likert scale answers for the below: Strongly disagree, Disagree, Neither disagree nor agree, Agree, Strongly agree.

Food variety

1. There are sufficient food options available.
2. I am able to meet dietary requirements, such as low-fat or diabetic, due to the variety of foods available.
3. The available food options facilitate my cultural and ethnic preferences.
4. Special meals and promotions are frequently offered.

Food quality

1. The food has a pleasing appearance.
2. The taste and flavour of the food are satisfactory.
3. I am satisfied with the nutrition of the food.
4. Food and beverages are provided at the right temperature at which they should be consumed.

Service quality

1. When I am served, I feel comfortable with the staff.
2. The service staff adheres to hygienic practices when serving.

3. The service staff is efficient.
4. I am satisfied with the hours of operation.

Price fairness

1. I believe the food prices are reasonable.
2. The portion size is proportional to the price of the meal.
3. The price of food and beverages is proportionate with their quality.

Customer satisfaction

1. I am pleased with the overall quality of the food and drink offerings.
2. I am pleased with the overall quality of the services.
3. I am pleased with respect to the overall prices.
4. I am pleased with the extend to which food and beverage services are offered matches expectations in overall.
5. I am pleased with the overall dining experience.