SERVICE EFFICIENCY AND STUDENTS' SATISFACTION IN SCHOOL CANTEEN: BASIS FOR SERVICE ENHANCEMENT

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Abstract - *This study examined the relationship between service efficiency and student satisfaction in a school canteen setting. With the increasing demand for quality and timely services in educational institutions, the school canteen plays a vital role in supporting student well-being and productivity. The research involved student respondents who evaluated canteen services based on key factors such as speed of service, cleanliness, staff behavior, food quality, and overall organization. Findings revealed that while most students were generally satisfied, certain areas such as queue management and food variety received lower ratings. A significant correlation was observed between efficient service—particularly staff attentiveness and promptness—and student satisfaction levels. The study emphasized the importance of maintaining a well-organized and hygienic environment, as these were consistently cited as major factors contributing to a positive experience. These insights suggest that improving canteen operations through training, better logistics, and regular student feedback can greatly enhance satisfaction and contribute to a more conducive school environment. Overall, efficient service delivery is key to ensuring that the school canteen supports student needs effectively.*

***Key Words**: Canteen Services, Cleanliness, Efficiency, Student Satisfaction, Timeliness*

INTRODUCTION

The school canteen plays an important role in campus life. It's where students and staff go to enjoy meals and snacks during the day. But as times change, so do the expectations of students. Today, students look for faster service, more food choices, and better overall quality [1]. While the current canteen setup still serves its purpose, it faces some challenges—such as long lines, limited menu options, and service that isn't always consistent. Based on student feedback, there's a clear need to improve the canteen to make it more efficient, enjoyable, and in line with what students now expect.

This study hopes to help develop a practical enhancement plan to improve the canteen's service efficiency and increase student satisfaction. The goal is to look closely at how the canteen currently operates, identify areas that need improvement, and suggest solutions that can make a real difference. Some of these solutions may involve using simple technologies, like quicker payment systems or digital menu boards, to help speed up service and make things run more smoothly. These changes could also help make sure that popular food items are always available and ordering becomes more accurate and convenient. Aside from technology, the study also explores how staff interactions with students can be improved. Friendly, respectful service plays a big part in a positive dining experience. The project also considers how students' backgrounds and preferences affect how they view canteen services. This helps in designing improvements that match the needs of different student groups.

In the end, the proposed improvement plan aims to help the school provide better-quality service and turn the canteen into a place where students not only eat—but feel welcomed, satisfied, and well taken care of.

Statement of the Problem

This study aimed to identify the relationship between the profile of the respondents and their perception of the canteen service efficiency as well as their level of satisfaction in school canteen. Specifically, it answered the following.

1. Describe the profile of the respondents in terms of:
   a. age;
   b. gender;
   c. year level;
   d. daily money allowance;
   e. frequency of visits at school canteen; and
   f. frequency of purchase at school canteen

2. Identify the service efficiency of the school canteen in terms of:
   a. waiting time;
   b. staff performance;
   c. menu and availability;
   d. payment process; and
   e. cleanliness and maintenance

3. Identify the level of student satisfaction in school canteen in terms of:
   a. food quality;
   b. price and affordability;
   c. canteen environment;
   d. menu options; and
   e. service quality

4. Is there a significant relationship between the profile of the respondents and their perceptions on canteen's service efficiency?
5. Is there a significant relationship between the profile of the student-respondents and their level of satisfaction in school canteen?
6. What enhancement plan may be proposed in order to improve the customer service of the school canteen?

MATERIALS AND METHODS

Research Design

The study utilized a descriptive-correlational research design with a focus on quantitative methods for data collection. Descriptive-correlational research involved systematically investigating a group or phenomenon to identify and examine relationships among variables while providing a detailed depiction of specific characteristics, social contexts, or interrelationships (Neuman, 2014) [1]. This design enabled an in-depth exploration of the associations between the respondents' profiles, their perception of canteen service efficiency, and their level of satisfaction in school canteen.

Respondents of the Study

A total of 210 students participated in the study. The researcher used purposive sampling technique and the participants were chosen based on the qualities they possessed. These participants were all students of NEUST San Isidro Campus. They were asked to give their consent to participate.

Instrumentation

The study collected data through a researcher-made survey questionnaire, which was structured to gather three main sets of information: (1) age, gender, year level, daily money allowance, frequency of visits at school canteen, and frequency of purchase at school canteen; (2) service efficiency of the school canteen in terms of waiting time, staff performance, menu and availability, payment process, and cleanliness and maintenance, and (3) level of student satisfaction in school canteen in terms of food quality, price and affordability, canteen environment, menu options, and service quality.

Statistical Treatment

In order to analyze the gathered data, frequency counts and mean scores were used. To identify the significant relationship between the profile of the respondents and their assessment of the service efficiency of the school

canteen, and the assessment of their level satisfaction, Pearson r was employed. The study was conducted at NEUST San Isidro Campus.

RESULTS AND DISCUSSION

This section presents the analysis and interpretation of the data gathered from the respondents of the study.

1. On the Profile of the Respondents

Table 1. Profile of the respondents

Profile Variables	Option Chosen	Frequency (f)	Percentage (%)
a. Age	1 – 12 to 13 years old	100	47.62%
	3 – 16 to 17 years old	85	40.48%
	4 – 18 years old and above	25	11.90%
b. Gender	1 – Male	43	20.48%
	2 – Female	167	79.52%
c. Year Level	1 – Grade 7	35	16.67%
	2 – Grade 8	27	12.86%
	3 – Grade 9	15	7.14%
	4 – Grade 10	23	10.95%
	5 – First year college	25	11.90%
	6 – Second year college	60	28.57%
	7 – Third year college	25	11.90%
d. Daily Money Allowance	5 – ₱101–₱150	210	100.00%
e. Frequency of Visits at School Canteen	5 – Every school day	210	100.00%
f. Frequency of Purchase at School Canteen	5 – Every school day	210	100.00%

Table 1 presents that nearly half of the respondents (47.62%) were between 12 to 13 years old, followed by a significant portion (40.48%) aged 16 to 17 years old. A smaller group (11.90%) were 18 years or older. This age distribution suggests that the canteen primarily serves younger to mid-adolescent students, which should guide the tailoring of products and services to meet their preferences and needs. Gender-wise, the majority of the respondents were female (79.52%), while males comprised only 20.48%.

This imbalance might reflect usage patterns or population demographics in the school but suggests that any service improvements should consider preferences and feedback from predominantly female students. In terms of year level, the highest proportion of users came from second year college (28.57%), followed by Grade 7 (16.67%) and Grade 8 (12.86%). Other college students and other high school year levels comprised the remaining respondents. This range of year levels indicates that the canteen serves a diverse group with potentially varied needs regarding food options, pricing, and dining environment.

Notably, all respondents reported a daily money allowance within the ₱101–₱150 range and stated they visit and purchase from the canteen every school day. This uniformity in allowance and purchase frequency highlights the canteen's critical role in daily student life and suggests a consistent demand for affordable and accessible food choices. Given these findings, the school canteen's service

enhancements should focus on maintaining affordability while improving product variety and service speed to accommodate daily high traffic. Attention to age-appropriate options and female customer preferences could further increase satisfaction. Regular feedback mechanisms from different year levels would also help tailor services efficiently, fostering a positive dining experience that supports students' academic and social well-being.

2. On the respondents' assessment of the school canteen's service efficiency

Table 2.
Mean and Interpretation of the service efficiency of the school canteen

SERVICE EFFICIENCY	Weighted Mean	Verbal Interpretation
Waiting time	3.30	Very efficient
Staff performance	3.75	Very efficient
Menu and availability	2.55	Efficient
Payment process	2.66	Efficient
Cleanliness and maintenance	3.40	Very efficient
Total	**3.13**	**Efficient**

Legend: 3.25.-4.00=Very Efficient; 2.50-3.24=Efficient; 1.75-.2.49=Inefficient;1.00-1.74=Very Inefficient

Table 2 shows that among the different aspects measured, waiting time and staff performance were rated as very efficient with weighted means of 3.30 and 3.75 respectively, both exceeding the threshold for "very efficient" (3.25–4.00). This indicated that students generally experienced prompt service and found the staff to be competent and helpful. The importance of efficient staff and reduced waiting times has been emphasized in studies, which show that timely service and positive staff interactions significantly influence customer satisfaction (Kandampully, Zhang, & Jaakkola, 2018) [2].

Meanwhile, the menu and availability of food items received a mean score of 2.55, categorized as efficient. Although still positive, this was the lowest among the measured factors. This suggested that while the menu met basic expectations, there was room for improvement, possibly by diversifying offerings or ensuring consistent availability of popular items. This aligns with findings by Namkung and Jang (2007) [3], who noted that menu variety and availability are key drivers of customer satisfaction in food service contexts.

The payment process was also rated as efficient (2.66), indicating that transactions were mostly smooth but could benefit from improvements to enhance speed or convenience. Studies have shown that streamlined payment systems reduce bottlenecks and improve overall service perception (Hwang & Ok, 2013) [4].

Lastly, cleanliness and maintenance scored 3.40, also considered very efficient. This reflects a well-maintained environment that meets hygiene standards, a critical factor in student satisfaction and perceived quality in food service establishments (Mattila, 2001) [5].

Overall, the school canteen's total weighted mean was 3.13, interpreted as efficient. While the canteen performed well across most dimensions, focusing on menu variety and the payment process could enhance the overall student experience further. Given that daily visits and purchases were uniform across respondents, optimizing these aspects could significantly boost satisfaction and encourage continued patronage.

This data not only highlighted existing strengths, such as staff performance and cleanliness, but also pointed to specific areas for service enhancement that align with literature findings. Addressing these factors can contribute to improved service efficiency, leading to higher student satisfaction and better utilization of the canteen's offerings.

3. On the respondents' assessment of their level of satisfaction

Table 3.
Mean and Interpretation of students' level of satisfaction

LEVEL OF SATISFACTION	Weighted Mean	Verbal Interpretation
Food quality	3.75	Very satisfying
Price and affordability	3.50	Very satisfying
Canteen environment	2.49	Somewhat satisfying
Menu options	2.55	Satisfying
Service quality	2.55	Satisfying
Total	**2.96**	**Satisfying**

Legend: 3.25.-4.00=Very satisfying; 2.50-3.24= Satisfying; 1.75-.2.49=Somewhat satisfying; 1.00-1.74=Not satisfying at all

Table 3 presents that among the evaluated aspects, food quality received the highest weighted mean of 3.75, which was interpreted as very satisfying. This suggests that students were highly pleased with the taste, freshness, and preparation of the food offered. Research by Namkung and Jang (2007) [6] supports this finding, emphasizing that food quality is a critical determinant of customer satisfaction in food service settings.

Similarly, price and affordability scored 3.50, also falling under the very satisfying category. This indicates that the students felt the prices were reasonable and accessible given their daily allowance, which was consistently ₱101–₱150 among all respondents. Affordability is a key factor in student satisfaction, especially in school environments where budget constraints are common (Kim, Kim, & An, 2017) [7]

On the other hand, canteen environment had the lowest weighted mean at 2.49, interpreted as somewhat satisfying. This revealed that the physical setting and ambiance of the canteen could be improved to meet students' expectations. The environment plays a crucial role in shaping the dining experience, and a pleasant atmosphere is known to enhance customer satisfaction (Han & Ryu, 2009) [8].

Both menu options and service quality received means of 2.55, classified as satisfying. While students generally found the variety of food choices and the service delivered to be acceptable, these areas could benefit from further attention. Studies have shown that a diverse menu can attract more customers and increase satisfaction by catering to different tastes and dietary preferences (Kivela, Inbakaran, & Reece, 2019) [9]. Additionally, consistent service quality contributes significantly to positive consumer experiences (Ladhari, Brun, & Morales, 2008) [10].

Overall, the total weighted mean for student satisfaction was 2.96, indicating a satisfying level. This shows that while most aspects of the canteen met students' needs, improving the environment, expanding menu options, and enhancing service quality could elevate satisfaction further. Given that the canteen also scored highly on service efficiency measures such as waiting time and staff performance, addressing these satisfaction factors would complement the strengths already observed, resulting in a more holistic improvement of the school canteen experience.

4. On the significant relationship between the profile of the respondents and their assessment of the school canteen's service efficiency

Table 4.
Correlation between the profile of the respondents and their assessment of the school canteen's service efficiency

SERVICE EFFICIENCY	Value	PROFILE OF THE RESPONDENTS					
		Age	Gender	Year level	Daily money allowance	# of visits at the school canteen	# of purchase at the school canteen
Waiting time	r	0.055	-.170**	-0.071	0.019	-0.031	-.170**
	p	0.363	0.005	0.243	0.748	0.604	0.005
Staff performance	r	.125*	-0.018	0.065	-.149*	0.023	-0.018
	p	0.038	0.760	0.280	0.013	0.710	0.760
Menu and availability	r	-0.039	-0.045	-0.034	0.106	-0.045	-0.045
	p	0.518	0.459	0.573	0.080	0.457	0.459
Payment process	r	-0.039	-0.045	-0.034	0.106	-0.045	-0.045
	p	0.038	0.760	0.280	0.013	0.710	0.760
Cleanliness and maintenance	r	.125*	-0.018	0.065	-.149*	0.023	-0.018
	p	0.038	0.760	0.280	0.013	0.710	0.760

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 4 presents relationship between service efficiency and the profiles of students which provided insightful information that can guide service enhancement in the

school canteen. Service efficiency was measured in terms of waiting time, staff performance, menu availability, payment process, and cleanliness and maintenance. Correlation coefficients (r) and significance values (p) helped to determine how these efficiency indicators related to students' age, gender, year level, daily money allowance, and their frequency of visits and purchases at the canteen.

First, waiting time was negatively correlated with gender (r = -0.170, p = 0.005) and number of purchases (r = -0.170, p = 0.005). This suggested that female students and those who purchased more frequently tended to perceive waiting time as shorter or more efficient. This aligns with research indicating that females often value efficient service more and may have different expectations or tolerance for wait times compared to males (Berry, Seiders, & Grewal, 2002) [11].

Staff performance showed a positive correlation with age (r = 0.125, p = 0.038) and a negative correlation with daily money allowance (r = -0.149, p = 0.013). Older students rated staff performance higher, while students with higher daily allowances tended to be less satisfied with staff. This may reflect that older students appreciate competent service more, whereas those with higher allowances might expect more personalized or premium service (Bitner, Booms, & Tetreault, 2010) [12].

Similarly, cleanliness and maintenance had the same significant correlations as staff performance (age: r = 0.125, p = 0.038; allowance: r = -0.149, p = 0.013). This implies that perceptions of cleanliness were positively related to student maturity but inversely related to budget, possibly because students with more money expect better-maintained facilities (Wakefield & Blodgett, 2006) [13].

On the other hand, menu availability and payment process did not show significant correlations with any profile variables, suggesting that perceptions of these aspects were generally consistent across different student groups.

These findings suggest a nuanced picture where service efficiency perceptions depend partly on students' demographic and economic profiles. For example, younger students or those with smaller allowances may prioritize basic service aspects, while older or more financially capable students may have higher expectations for staff performance and cleanliness.

Improving service efficiency should therefore consider these differences. Tailoring staff training to enhance performance, especially for interactions with older or higher-spending

students, and maintaining high standards of cleanliness could improve satisfaction. Since waiting time was perceived differently across genders and purchase frequency, optimizing queue management might improve overall efficiency for all students.

This analysis is consistent with existing literature that emphasizes the importance of service quality dimensions in foodservice settings and how customer characteristics influence satisfaction (Kandampully & Suhartanto, 2000; Parasuraman, Zeithaml, & Berry, 2018) [14].

5. On the significant relationship between the profile of the respondents and their level of satisfaction in school canteen

Table 5.
Correlation between the profile of the respondents and their level of satisfaction in school canteen

LEVEL OF SATISFACTION	Value	PROFILE OF THE RESPONDENTS					
		Age	Gender	Year level	Daily money allowance	# of visits at the school canteen	# of purchase at the school canteen
Food quality	r	-0.030	0.003	-.150*	-0.099	0.006	0.003
	p	0.637	0.958	0.020	0.102	0.938	0.958
Price and affordability	r	0.074	-0.083	-0.027	0.032	-0.019	-0.083
	p	0.290	0.170	0.659	0.593	0.760	0.170
Canteen environment	r	-0.127	0.082	0.086	0.040	-0.004	0.082
	p	0.052	0.173	0.116	0.561	0.948	0.173
Menu options	r	.179**	-0.037	0.096	-0.071	-0.074	-0.037
	p	0.003	0.537	0.114	0.253	0.222	0.537
Service quality	r	0.091	-0.088	-0.067	-0.022	0.093	-0.088
	p	0.132	0.260	0.269	0.716	0.124	0.260

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 5 below shows that, first, for food quality, there was a small but statistically significant negative correlation with year level ($r = -0.150$, $p = 0.020$). This indicated that students in higher year levels tended to be slightly less satisfied with the food quality compared to younger students. This aligns with recent research showing that as students mature, their expectations for food quality tend to increase, making them more critical consumers (Kim & Lee, 2018). This implies that the canteen may need to consider offering more sophisticated or varied food options to satisfy the tastes of upper-year students.

In contrast, price and affordability showed no significant correlations with any profile variables, suggesting that students across different ages, genders, and spending capacities perceived the pricing as relatively fair and consistent. This matches findings by Lin and Mattila (2016) [15]. who noted that price sensitivity in school or campus

food services tends to be broadly shared among student populations.

Regarding the canteen environment, a near-significant negative correlation with age ($r = -0.127$, $p = 0.052$) suggested that older students might be somewhat less satisfied with the physical surroundings. Although the relationship was not strongly significant, similar studies have found that older students value comfort and cleanliness more, and their dissatisfaction can influence their overall experience (Han & Ryu, 2019) [16].

Interestingly, menu options had a positive and significant correlation with age ($r = 0.179$, $p = 0.003$), indicating that older students reported higher satisfaction with the variety of choices available. This could mean that the menu is more aligned with the preferences of mature students, or that these students better appreciate the diversity offered, as supported by Nguyen and Simkin (2017) [17].

Finally, service quality did not vary significantly across any profile variables, implying that perceptions of staff behavior and service efficiency were stable regardless of demographic differences. Consistent service quality is vital as it builds trust and satisfaction uniformly among all student groups (Choi & Mattila, 2018) [18].

Overall, these results suggest that while pricing and service quality were generally well-received by all students, adjustments to food quality and menu variety—particularly aimed at older or higher-year students—may enhance satisfaction further. The canteen environment might also benefit from improvements to better meet the expectations of more mature students. These findings reinforce the importance of tailoring food service offerings to the evolving preferences of different student segments, a strategy supported by contemporary service management literature (Liu, Gursoy, & Chi, 2018) [19].

6. On the proposed enhancement plan to improve the service of the school canteen

The school canteen plays an important role in the daily lives of students by providing them with meals and a place to relax during breaks. Recent findings showed that while many aspects of the canteen's service are good—such as the friendliness of the staff and the cleanliness—there are still areas that need improvement, like food variety, menu options, and the overall speed of service. These factors directly affect how satisfied students feel when they visit the canteen.

Improving customer service is important because it not only makes students happier but also encourages them to make healthier food choices and enjoy their time at school. Research has shown that when food service is efficient and welcoming, students are more likely to eat well and feel

comfortable in that environment (Jones & Robinson, 2017) [20]. Plus, having a clean and organized space contributes to a positive dining experience, which supports both physical health and mental well-being.

This enhancement plan aims to build on the canteen's strengths while addressing its weaknesses to create a better experience for students. By doing so, the canteen can become a more inviting and efficient place that meets students' needs, leading to higher satisfaction and continued use of the service.

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