

School Canteen Management and Service Quality of Junior High Schools in Digos City Division

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Abstract. This study aimed to determine the extent of school canteen management as a determinant of service quality of junior high schools in Digos City Division. One hundred (100) junior high school learners participated in this study. The study used the non-experimental quantitative design utilizing the descriptive method of research. The findings revealed that school canteen management was extensive regarding personnel and staff, price and commodities, quality and quantity of food served, services, and canteen sharing. However, wearing white shirts and wearing hairnets was extensive. Healthy choices of foods were sold at competitive prices and were too costly for learners to afford. The high school canteens serve fresh food, and the canteen staff undertakes extensive training to ensure quality and food safety. Moreover, the service quality in tangibility, assurance, reliability, responsiveness, and empathy was moderately extensive. However, indicators of assurance and reliability were less extensive. The canteen staff's positive behavior towards clientele inspired students to patronize their produce, keep service accurately, keep service dependently, and staff being cheerful and kind all the time were less extensive. There was a significant relationship between school canteen management and service quality. School canteen management, in terms of empathy and assurance, significantly influences service quality. School canteens should provide clean and safe food for the learners. The canteen coordinator should plan for team building activities. Deped should conduct more training and workshops for canteen staff.

KEY WORDS

1. School canteen management 2. service quality 3. junior high school

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1. Introduction

The establishment and operation of a school canteen play a crucial role in promoting the health and well-being of students. Beyond mere convenience, a well-managed canteen provides nutritious food options, fosters healthy eating habits, and creates a supportive environment for learning. This study explores the importance of school canteens, the key considerations in their establishment, and best practices for their operation. A canteen is an establishment where various snack and drink items are offered along with food that is served and consumed. In order to provide its pupils with the energy they need to complete their daily tasks, schools use canteens to provide for their food and nutritional needs. Additionally, a variety of foods and recipes that improve students' abilities and knowledge should be offered by the canteen. Presently, school canteens have various challenges that need to be addressed especially in

terms of the canteen service quality provided to students. For instance, a lot of students complain about the price of canteen products because it is too pricey, hence, the students cannot afford them because of their insufficient allowances. Besides, teachers and students also recommend a more spacious venue for the canteen because most of the time it is crowded. There are also various experiences and complaints from students regarding the kind or variety of foods displayed in the canteen. Hence, the researcher is challenged to conduct this study to assess the canteen service quality provided to students where the findings would serve as a feedback mechanism for providing good and satisfying canteen services. Besides, there is no existing study conducted pertaining to canteen service quality at the time of the study in the Schools Division of Digos City Division. The American Academy of Pediatrics (AAP) recommends that schools promote healthy eating habits by providing nutritious food options and limiting access to unhealthy foods. It was reiterated that "healthy eating is an essential component of optimal child and adolescent health, and schools can play an important role in promoting healthy behaviors (AAP, 2018). By offering a range of nutritious food options, school canteens can help students develop healthy eating habits and realize that good nutrition is essential for maintaining good health and well-being. A review of various research published in the *Journal of Nutrition Education and Behavior* discovered that "schools that encourage healthy eating habits among pupils. Have a favorable impact on academic performance. (Graziose et al., 2021). The article provides a systematic review of numerous. Studies that investigated the impact of school-based Nutrition treatments affect academic achievement and behavior. The authors discovered schools that encourage Healthy eating habits among students have a favorable impact on academic performance, health consequences, and general well-being. Research on school canteens aligns with the United Nations Sustainable Development Goals (SDGs), particularly SDG 2 (Zero Hunger) and SDG 3 (Good Health and Well-being) (United Nations, 2018). By improving access to nutritious food and promoting healthy eating habits among school children, school canteens contribute to efforts aimed at eradicating hunger, improving nutrition, and enhancing overall health outcomes in Africa. In the Philippines, The Department of Education is strongly committed to supporting students' health and well-being through its curriculum in schools and a range of initiatives that offer opportunities for physically fit individuals who love eating healthy food. Schools are encouraged to implement comprehensive health and well-being programs, including food and nutrition education. The establishment and operation of the school canteen are important in developing love and interest in buying nutritious and healthy food among students, faculty, and the school personnel, making it possible for them to enjoy nutritious and healthy food at affordable prices during the school day The Department of Education further stressed the significance of including nutrition and health in the curriculum in recent years. This dedication is demonstrated by the range of initiatives that support mental and emotional health in addition to physical fitness, guaranteeing a comprehensive approach to student health (Garcia, 2021). Research indicates that educational institutions that implement all-inclusive health initiatives, such as well-run canteens providing wholesome food choices, witness enhancements in student achievement and a decrease in absenteeism. Schools can play a critical role in forming lifelong habits that counter the rising concerns of childhood obesity and other diet-related diseases by creating environments where healthy eating is the norm. These programs also comply with international health standards, which strengthens the Philippines' resolve to advance public health via education. The effective implementation of

health programs in Philippine school canteens is hampered by a number of issues, despite efforts to promote nutritious eating. According to a Cruz (2020) study, a lot of school canteens continue to serve a variety of sugar-filled drinks and unhealthy snacks because these products are so profitable. Furthermore, canteens frequently struggle to consistently source fresh, healthful ingredients due to a lack of funding and resources. The issue is made worse by the canteen staff's inadequate training in food safety and nutrition, which results in uneven food quality served to students. Resolving these problems is essential to the accomplishment of health programs meant to enhance the well-being of students. To guarantee that everyone, regardless of

socioeconomic status, can afford healthy eating, students should be able to purchase wholesome food at fair prices. Students can be inspired to make healthier food choices on a daily basis by the reasonably priced, wholesome meals offered in school canteens. This strategy promotes both their physical and cognitive development, since improved concentration and learning outcomes are associated with a healthy diet. Schools can have a positive impact on students' long-term eating habits by making nutritious options the most economical and convenient option. Ensuring fair prices for nutritious food also fosters equity by allowing all students to take advantage of the same health benefits.

2. Methodology

Presented in this chapter were the methods used in the study consisting of research design, research respondents, research instrument, the data gathering procedure, and the data analysis. The purpose of this study was to determine the impact of school canteen management on the service quality of the Secondary Schools District, Digos City Division.

2.1. Research Design—This study employed a non-experimental quantitative research design utilizing a correlational technique. A substantial proportion of quantitative educational research is non-experimental because many important variables of interest are not manipulable. Because non-experimental research is an important methodology employed by many researchers, it is important to use a classification system of non-experimental methods that are highly descriptive of what we do and which also allows us to communicate effectively in an interdisciplinary research environment.

2.2. Research Respondents—The respondents of the study were one hundred (100) junior high school learners of the Secondary School District, Digos City Division who were randomly selected. The respondents are bonafide learners of School Year 2023-2024. The sample size of one hundred was obtained using strat-

ified random sampling. In this technique, the researcher randomly picked out from the list of learners using the fishbowl method. These chosen learners were considered the respondents of the study.

2.3. Research Instrument—The researcher utilized an adapted questionnaire from the study of Constantino (2019), which was modified to suit the concept, place, situation, and ideas of the present study. The draft of the research instrument was submitted to the research adviser for comments, suggestions, and recommendations. The final copy of the research survey was validated by the panel of experts for approval. The final revision was made by incorporating all the corrections, comments, and suggestions given by the experts before distribution and administration. The draft of the questionnaire was presented and evaluated by some expert validators. A standard evaluation tool was

given to them to rate, comment on, and suggest the improvement and development of the questionnaire. The results of the validation together with the draft of the research instrument were submitted to the research adviser for comments and suggestions. The ambiguous items were deleted; the weak items were strengthened and improved. After correction and refinement, the research instrument was returned to the re-

searcher for finalization. This study used a self-constructed questionnaire. It was designed to draw out information concerning the impact of school canteen management and service quality. For the necessity of validation and comprehensive content of the instrument, the researcher sought knowledgeable people in the field of comments and suggestions. The following interpretations of the data are found below.

Scale Rating, Descriptive Rating, and Interpretation

Scale Rating	Descriptive Rating	Interpretation
4.20 – 5.00	Very Extensive	The school canteen management is always manifested.
3.40 – 4.19	Extensive	The school canteen management is oftentimes manifested.
2.60 – 3.39	Moderately Extensive	The school canteen management is sometimes manifested.
1.80 – 2.59	Less Extensive	The school canteen management is rarely manifested.
1.00 – 1.79	Not Extensive	The school canteen management is not manifested.

Scale Rating, Descriptive Rating, and Interpretation

Scale Rating	Descriptive Rating	Interpretation
4.20 – 5.00	Very Extensive	Service quality is always manifested.
3.40 – 4.59	Extensive	Service quality is oftentimes manifested.
2.60 – 3.39	Moderately Extensive	Service quality is sometimes manifested.
1.80 – 2.59	Less Extensive	Service quality is rarely manifested.
1.00 – 1.79	Not Extensive	Service quality is not manifested.

The pilot testing was conducted in the Secondary Schools District and the respondents were not included in the research survey. The pilot testing was purposely conducted to establish the reliability and validity of the test instrument. The questionnaire was designed and modified to suit the needs of the respondents. The instrument that was used in the study was a validated questionnaire which was constructed by

the researcher after readings from articles and journals. It consisted of two parts. Part I deals with the indicators of the school canteen management in terms of canteen personnel and staff, price and commodities, quality and quantity of food served, services, and canteen sharing. Part 2 dealt with service quality in terms of tangibility, assurance, reliability, responsiveness, and empathy.

2.4. *Data Gathering Procedure*—The following steps were observed in the gathering of the data. An endorsement letter from the Dean of the Graduate School was given to the graduate student on October 15, 2023, for the approval of the division superintendent, a letter of permission for the Schools Division Superintendent and the School Head. Another letter was sent to the Public Schools Division Superintendent and the School Heads requesting that the

questionnaires be distributed to the respondents on November 23, 2023. Upon approval, the researcher personally administered and facilitated the administration and distribution of the questionnaire on December 6-13, 2023. The questionnaire was retrieved immediately after the conduct, and the gathered data will be scored, recorded, and classified with the guidance of the statistician. The computation results were tabulated, analyzed, and interpreted based on the purpose of the study.

2.5. *Data Analysis*—The following statistical tools were used, and the null hypothesis was tested at a 0.05 level of significance. The data gathered was tallied and treated using the statistical analysis methods. Mean. The weighted arithmetic mean is applicable to options of different weights (Calmorin, 1998). In this study, the statistical tool was used to measure the extent of school canteen management and service quality. Pearson's r . The person

product-moment of the correlation coefficient is a linear correlation to find the degree of the association of two sets of variables (Calmorin, 1998). In this study, this statistical tool was used to determine the relationship between school canteen management and service quality. Regression Analysis. The regression analysis was used to determine the domains of school canteen management that significantly influence service quality.

3. Results and Discussion

This chapter presents the discussions of the problems in this study. They are discussed thoroughly, analyzed, and interpreted under the following headings and sequence: school canteen management and service quality of junior high schools in Digos City.

The summary of the Extent of School canteen Management

Table 1 presents the summary of the level of school canteen management in Digos City Division in terms of its indicators: Canteen personnel and staff, Price and commodities, canteen sharing, quality and quantity of food served, and services among schools in Digos City Division.

The result is focused on the highest and lowest mean ratings of indicators which are as follows: Canteen personnel and staff (4.29), thus very extensive, and services (4.12), thus extensive. The overall mean rating of 4.21 suggests that the school canteen management of schools is often time manifested, thus extensive among schools in the Division of Digos City.

A canteen rule based on this would be beneficial because it would motivate those in charge of providing food to minimize health risks associated with inadequate nutrition. This involves having the knowledge and skills to make healthy

food choices, adopting a positive attitude toward food, having access to healthy food options, and maintaining a balanced diet. The American Academy of Pediatrics (AAP) recommends that schools promote healthy eating habits by

Table 1. Summary of the extent of school canteen management

No.	Statements	Mean	Descriptive Equivalent
1	Canteen personnel and staff	4.29	Very Extensive
2	Price and commodities	4.26	Very Extensive
3	Quality and quantity of food served	4.16	Extensive
4	Services	4.12	Extensive
5	Canteen sharing	4.24	Very Extensive
Overall Mean		4.21	Very Extensive

providing nutritious food options and limiting access to unhealthy foods. It was reiterated that "healthy eating is an essential component of optimal child and adolescent health, and schools can play an important role in promoting healthy behaviors (AAP,2018). The school canteen management should encourage the students to buy nutritious and healthy foods at affordable prices. They should prevent the school children from staying off campus during recess time and lunch break. Well-prepared and clean food are vital features of an efficiently run school canteen. It should also prepare appealing and nutritious food for the students. A canteen is a place where food is to be served and eaten, where different snack and drink products are sold. A school utilizes a canteen to meet the food and nutritional needs of its students for them to have the energy to accomplish the tasks that they would do for

the day. The canteen should also provide the students variety of foods and dishes that enhance their skills and knowledge.

Summary of the Level of Service Quality

Table 2 shows a summary of the teachers' personality traits, which reveals that the overall mean is 3.31. The three indicators with the highest and lowest mean are presented with their corresponding mean rating: Tangibility (3.89) and Empathy (2.82). One of these indicators has a descriptive equivalent of extensive; however, most of the indicators have a descriptive equivalent of moderately extensive. The overall mean was 2.88, or moderately extensive, which explained that the respondents' service quality was able to adapt to service quality in the school by dealing well with the students, parents, and the school community and creating a healthy learning environment.

Table 2. Summary of the level of service quality of schools

Indicators	Mean	Descriptive Equivalent
Tangibility	3.89	Extensive
Assurance	2.50	Rarely Extensive
Reliability	3.59	Moderately Extensive
Responsiveness	3.10	Moderately Extensive
Empathy	2.82	Moderately Extensive
Overall Mean	3.18	Moderately Extensive

The study by Lee et al. (2019) investigated the key factors that affect students' satisfaction with on-campus food service operations. The study discovered that the most important areas in establishing satisfaction levels are meal quality, price, and convenience. The survey also found that the environment and the quality of the services are crucial determinants of student satisfaction. The significance of food quality, pricing, convenience, environment, and service quality in determining student happiness makes this study relevant to the research. Quality is something that can be measured to meet expectations. Based on the study by Putra et al. (2020), the appearance of food has been an important factor influencing customer satisfaction. The visual appeal of food should be matched by excellent food quality in the restaurant, and food quality has three major factors: flavor, menu variety, and nutritional value. Employee training influences perceived service quality. They concluded that management may maintain consistency and reliability of perceived service quality by increasing employees' capability through training and a shared understanding.

The Relationship Between the Extent of School Canteen Management and Service Quality

Table 3 shows data about the significant re-

lationship between school canteen management and service quality. Analyzing the data by Pearson Product-Moment Correlation Coefficient or Pearson r, the results are the computed r-value for school canteen management of schools versus service quality is 0.41, which denotes an almost substantial relationship or definite relationship. Hence, there is a significant relationship between school canteen management and the service quality of schools. The greater the school canteen management of teachers, the greater the service quality of schools in handling the canteen; hence, a positive correlation occurs when an increase in two variables decreases simultaneously. This is a mere example of linear correlation or straight-line relationships between two variables. A correlation can range between -1 (perfect negative relationship) and +1 (perfect positive relationship), with 0 indicating no straight-line relationship. According to Asigbee et al. (2018), nourishment and physical activity enrich educational achievement and a sense of accomplishment. Students with a low overall diet standard were significantly more likely to fail the assessment. As a result, the active, healthy nutrition group performed better on standardized reading, math, and science achievement tests.

Table 3. There is a significant relationship between school canteen management and the service quality of schools' canteens

Variables	r-values	computed t-value	P value	Remarks/Decision
School canteen management (x) to Service quality (y)	0.41	3.89	0.011	Reject

Note: Significance when $P < 0.05$

This means that, besides addressing childhood obesity, schools should be viewed as one of the key settings for promoting healthy eating habits. According to research by Pineda et al.

(2021), Micha et al. (2018), and O'Hallaron (2020), school environments have a significant impact on dietary habits and the fight against childhood obesity. Schools can make a big dif-

ference in students' general health and well-being by encouraging wholesome food choices, offering information on balanced diets, and fostering positive eating environments. In addition to treating current health issues, this integrated approach creates lifelong habits that support healthier lifestyles after school.

On the Indicators of School Canteen Management that Significantly Influence the Service Quality of Schools

Table 4 depicts the regression coefficient analysis on the significant influence of school

canteen management that significantly influences the service quality of the school. All indicators of school canteen management provided, namely, canteen personnel and staff (0.344), price and commodities (0.152), quality and quantity of food served (0.015), services (<.001), and canteen sharing (0.345), indicate statistical significant influence on the service quality of schools in Digos City Division. This gives empirical evidence to show that the indicators of servant leadership behavior directly influence teachers' personality traits.

Table 4. Regression coefficient analysis on school canteen management that significantly influences the service quality of schools' canteen

Coefficients	Model	Unstandardized B	Standard Error (SE)	Standardized Coefficients	t	p	Decision
H ₀	(Intercept)	3.356	0.056		60.083	< .001	
H ₁	(Intercept)	0.167	0.157		1.069	0.287	
	Canteen Personnel and Staff	0.086	0.091	0.100	0.949	0.344	Accept null
	Price and Commodities	0.132	0.092	0.158	1.444	0.152	Accept null
	Quality and Quantity of Food Served	0.203	0.082	0.257	2.472	0.015	*Reject null
	Services	0.337	0.073	0.425	4.638	< .001	*Reject null
	Canteen Sharing	0.087	0.092	0.100	0.898	0.345	Accept null
R ² = 0.1681		F-value = 116.350		p-value = < .001			

Meanwhile, the R2 value of 0.1681 suggests that the school canteen management ac-

counts for 16.81 of the variance in service quality. This provides empirical evidence that vari-

ability of the school canteen management can be accounted for and be explained by the indicators as enumerated under personality traits of schools in the Digos City Division. In addition, the F-value shows all the sums of squares, with regression being the model and Residual being the error. The F-value (116.350) and F-statistic are significant $p < .001$, indicating that the model is significantly a better predictor of service quality. According to Ismail et al. (2019), menu variety was discovered to be a significant aspect in attracting and reflecting the needs, expectations, and satisfaction of cafeteria customers. It impacts the food service industry's performance. Because of menu diversity, students can get an assortment of nutrients for their bodies to function and perform properly and have the option to choose according to their preferences. It is also considered a way in which the customer compares the services or products with a given expectation (Sudigdo et al., 2019). It can be stated that service quality is about how the customer perceived a given product or service with a certain expectation at the end of patronizing such service or product. The customer expects more from such service or product to be satisfied. While Imran (2018) and Smith et al. (2020) have found a strong positive relationship between meal quality and both consumer satisfaction and the likelihood of repeat purchases. Aspects that enhance the whole dining experience, such as staff conduct, cleanliness, and service efficiency, are also included in the concept of service quality in school canteens. Prioritizing these components in management strategies can greatly improve the perceived quality of the services. Additionally, a well-run canteen that regularly provides excellent food and service can support students' healthy eating habits and create a positive school climate. As a result, maintaining excellent service quality is crucial for school canteen management, which in turn affects student happiness and the possibility that they would visit the canteen again. According to a study by Ali and Abdullah (2019), student happiness and their propensity to make repeat purchases of food are highly impacted by the quality of food offered in school canteens, which supports the findings of Imran (2018) and Smith et al. (2020). Because of their ability to improve the dining experience through friendliness and professionalism, canteen personnel and staff are vital to the level of service provided. The cost and quality of the goods must be balanced to guarantee affordability without sacrificing quality, which influences how much value students place on it. Ensuring that the food given to students meets their nutritional needs and preferences while maintaining high quality and quantity standards is crucial for ensuring their overall satisfaction. A favorable relationship between students and the canteen is fostered by the staff's efficient and courteous service delivery, which guarantees a pleasant dining experience. Furthermore, the communal aspect of meals, or "canteen sharing," has the potential to improve overall happiness and social interactions, which emphasizes the significance of service quality in managing school canteens.

4. Conclusions and Recommendations

This chapter presents the findings, conclusions, and recommendations based on the results of the data analyzed, discussed, and implications drawn. Conclusions were based on the findings generated, and recommendations were based on the implications of the discussions.

4.1. Findings—Based on the analyses and interpretations of the data gathered, the following findings were drawn according to the sequence of the study's objectives. The extent

of school canteen management, including canteen personnel and staff, price and commodities, quality and quantity of food served, services, and canteen sharing, has obtained an overall mean of 4.21, with the mean descriptive equivalent of very extensive, thus always manifested. The extent of service quality in terms of tangibility, assurance, reliability, responsiveness, and empathy was 3.18, or moderately extensive, thus sometimes manifested. There was a relationship between school canteen management and quality service of school canteens; an R^2 value of 0.1681 suggests that the school canteen management accounts for 16.81 of the variance of quality service. The F-value (116.350) and F-Statistics were significant $p < .001$, which tells that the model is significantly a better predictor of service quality. Results indicated that there was sufficient evidence to reject the null hypothesis. Thus, there was a significant relationship between the two variables. The quality and quantity of food served with $p < 0.015$ and services $p < 0.001$, mean that the probability value is less than the acceptance region with these two indicators. Therefore, the null hypothesis is rejected, and therefore, these two domains of school canteen management significantly influence service quality. On the other hand, canteen personnel and staff, price and commodities, and canteen sharing do not significantly influence service quality. They may not be as critical in determining service quality as the more fundamental factors of food quality, cleanliness, and overall food safety. This could explain why canteen personnel and staff, price and commodities, and canteen sharing do not significantly influence service quality in this study. Pearson's correlation showed a significant correlation between the extent of school canteen management ($r=0.41$) and service quality among schools in the Digos City Division.

4.2. *Conclusions*—Given the findings of the study presented, the following were the con-

clusions, to wit; School Canteens in Digos City Division exhibited very extensively in its practice of canteen personnel and staff, price and commodities, quality and quantity of food served, services, and canteen sharing. The service quality in terms of tangibility, responsiveness, empathy, assurance, and reliability among schools in Digos City Division revealed affective exhibits moderately extensive in its practice of canteen management. There was a significant relationship between the extent of school canteen management and service quality among schools in the Digos City Division. The findings of the regression analysis demonstrate that the service quality of the school canteens in the Digos City Division is moderately influenced by the quality and quantity of food served and services. A slightly smaller but no less significant influence is that of canteen personnel and staff, price and commodities, and canteen sharing. These results imply that raising these factors can improve students' perceptions of the quality of the services. Furthermore, these indicators may influence teachers' personality traits through their servant leadership behavior, which in turn affects the school environment as a whole.

4.3. *Recommendations*—With the presented conclusions of the study, the following were recommendations, to wit; Teachers. This study may provide enough information to understand the importance of integrating nutrition education into their curriculum, fostering a healthier and more focused classroom environment Learners. This study may allow learners to experience improved academic performance and overall well-being from healthier eating habits. Future researchers. May use this for future study and use these findings as a foundation for exploring more complex relationships between school nutrition initiatives and broader aspects of student development.

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