INVESTIGATING STUDENTS' PERCEPTION OF FOOD SERVICE QUALITY IN SELECTED SECOND CYCLE INSTITUTIONS IN BOLGATANGA MUNICIPALITY

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ABSTRACT

Food is important for good health and the proper growth and development of the body. Individuals who use their brains like students need proper feeding in order to boost their thinking and reasoning capacities. Failure to meet their daily feeding intake could result in poor grades, being absent from school, and being inattentive in class. The aim of the study was to investigate students' perceptions of food service quality in selected second-cycle institutions in Bolgatanga Municipality. The study employed a mixed-methods research approach. The target population of this study included all students at Bolgatanga Senior High School, Bolgatanga Technical Institute, and Zuarungu Senior High School. The study employed Yamane's 1967 formulae to determine the sample size of 150 students from the selected second-cycle institutions. A questionnaire was used to collect data from the respondents. A stratified simple random sampling technique was employed to select students for the study. The data were analyzed with SPSS version 21. The research instrument for this study passed a reliability test using a modified version of Cronbach's alpha. The study revealed that students are served with weevil-infested beans, and this makes them lose appetite and resort to other options, which they think can cater for their nutrition. It is recommended that the kitchen staff make sure that meals prepared for students meet the daily nutritional demands for healthier growth.

Keywords: Food service, Food quality, healthier food, poor feeding, infested ingredients

INTRODUCTION

A growing percentage of the captive second-cycle student market uses the foodservice outlets on campus while they are studying, making educational institutions one of the major parts of the worldwide foodservice industry [1]. In order to affect students' levels of satisfaction, frequency of meals, and overall college experience, their perceptions of the on-campus foodservice operation are vital [2]. It has become more difficult to achieve student satisfaction with on-campus foodservices among varied student groups, especially on campuses with limited foodservice options, due to the reported enrollment growth, the economy, and the captive nature of the college-student foodservice industry. Some students are culturally diverse, experienced in their dining habits, and frequently confined to campus, which presents a number of issues for foodservice suppliers [3] [4].

The provision of food at secondary boarding schools is an additional service to the delivery of instruction, and it is a non-profit business with a finite budget [5]. Consequently, unlike in

university cafeterias or other commercial service sectors where customers pay the whole cost of meals, the foodservice offered in public boarding schools in Ghana is subsidized. All boarders are required to eat in the dining halls, where a variety of meals are served at various mealtimes as part of the boarding school food service. Food sellers and self-stored food kept in dorm rooms' "chop boxes" are two other sources of meals outside of dining halls that students must pay for [6].

Due to the communal feeding of numerous students who demand special care and attention, boarding schools stand out among all institutional catering services and continue to serve as students' second homes. Surprisingly, actual data on the quality of meals provided to senior high school boarders and their level of satisfaction have not been sufficiently examined. Instead, mid-day meal programs in junior high and primary schools have received more attention from studies on school foodservice satisfaction, notably from industrialized nations [7] [8]. Additionally, research on food concerns in boarding schools has only examined nutritional intake and the state of malnutrition in boarding and non-boarding students [9]. Studies on food-related issues in boarding secondary schools in Ghana have, in the case of developing nations, tended to concentrate more on food hygiene and safety [10], while it appears that the degree to which boarding secondary students are satisfied with dining hall meals has been disregarded.

Ha and Jang [11] stressed that residential students' cultural backgrounds affect how they judge the caliber of the dining experience provided by on-campus foodservice operations. It can be claimed that the students' impressions of on-campus foodservice operations are vital to their overall pleasure and regularity of dining at these outlets because boarders have little to no access to alternate sources of meals. According to the College and University Consumer Trend Report [12], only 28% of American students surveyed were pleased with the campus's healthy menu options, and only 34% said they were generally satisfied with the on-campus dining facilities, which ultimately affected how often they ate out.

The quality of foodservice is regarded as a primary academic excellence criterion and an important strategic variable to increase the market share of institutions and service providers, with long-lasting effects on the business and its students, according to Ezeokoli and Ayodele [13]. Foodservice, according to Klassen, Trybus, and Kumar [14], is a crucial element that affects students' satisfaction. Additionally, earlier research has demonstrated that a number of foodservice characteristics, including meal quality, price justice, hygiene, food variety, service quality, food price, and ambiance, may have a significant impact on university students' happiness [15]. In colleges, the foodservice outlet is the main method of providing meals to students [16]. Food can help students become more focused on their academic studies, which in turn can have an impact on their academic performance, according to Drummond and Brefere [17].

Ruetzler, Taylor, and Hertzman [18] assert that campus foodservice has a significant impact on students' general contentment. The canteens offer products and services that can improve the social, economic, educational, and personal fulfillment of all the members of today's increasingly diverse university population. Students need higher levels of focus and friendlier treatment. The quality of the meal, the eating area's cleanliness, the ambiance, and the freshness of the ingredients all contribute to customer happiness [19]. According to Amelia and Garg [20] (2016), the first impression, meal quality, serving time, and workers are the key determinants of customer satisfaction with foodservice. Students' pleasure in university cafeterias entirely depends on the standard of the food and beverages offered, their variety and options, as well as a reasonable price and value. Amelia and Garg [20], in response to increasing demand, campus administrators have intensified their efforts to find and hire only the most qualified and experienced foodservice directors.

In order to successfully draw customers to the dining services, on-campus foodservice providers will need to understand their customers' behavior and endeavor to satisfy them. There has not been much research on students' perceptions of on-campus foodservice operations in Ghana, despite the fact that an increasing number of studies have looked at the quality of service, quality of food, value for money, food options, and ambience in university foodservices [21]. In this context, the study looks into the quality of the meals served in selected second-cycle institutions in the Bolgatanga Municipality.

MATERIALS AND METHODS

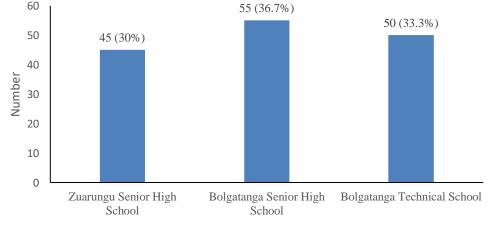
In order to describe and determine the quality of meals served in particular second-cycle institutions in the Bolgatanga Municipality, research was done using a combination of descriptive methods and survey methods. Quantitative data was processed and statistically analyzed using a parametric approach. The target population of this study included all students in Bolgatanga Senior High School, Bolgatanga Technical Institute and Zuarungu Senior High School. The study employed Yamane's Yamane 1967 formulae, n = N/(1 + Ne2), to determine the sample size of 150 students from the selected second cycle institutions. The major tool for gathering a variety of data pertinent to the needs of the research was the questionnaire. A stratified simple random sampling technique was employed to select students for the study. Pre-testing of the data gathering tools took place at a close-by senior high school (Zamse Secondary Technical in the Bolgatanga Municipality). Because the school is situated in the Upper East Region, the pre-testing was conducted there.

Two research assistants were trained by the researchers who helped with the data collection; this was because of the concurrent data collection procedure. One hundred and fifty (150) questionnaires were administered to one hundred and fifty (150) respondents. Data were analyzed with SPSS version 21. The research instrument for this study passed a reliability test using a modified version of Cronbach's alpha. The Cronbach alpha value indicates how dependable a research instrument is for a certain study (Saunders et al., 2015). A reliability test that has a Cronbach alpha () of (0.7) or higher is considered to be satisfactory. Using all 29 question items resulted in score of 0.80 according to the reliability test. This demonstrated that the research tool was very trustworthy for the intended usage.

RESULTS AND DISCUSSION

Demographic Characteristics

Presented in Figure 1 are the study's demographic traits. According to Figure 1's findings, Bolgatanga Senior High School was where the majority of respondents attended. 55 (36.7%) of the total respondents were one of them. The Bolgatanga Technical School came next. 50 (33.3%) of the responders were made up of them. The least represented school, Zuarungu Senior High School, provided 30% of all respondents.



Gender of respondents

The gender of the respondents is shown in Figure 2. Females made up half of the responders across all schools. They made up around 50.7% of the respondents. A total of 49.3% of people were male. 65.3% of the responders, or more than 50%, were likewise in their third year. 5.3% were in their first year, compared to 29.3% who were in their second year. First-year students were purposefully given a small sample size in order to account for those who can provide more precise data. Ages 18 to 20 made up 58.7% of the respondents, or the other half. About 29.3% of the population was between the ages of 14 and 17. Only 12% of those who responded were older than 21.

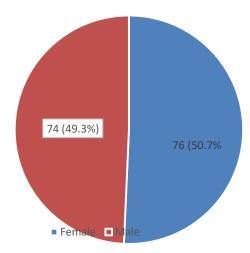


Figure 2: Gender of respondents

Students' perception of nutritional value of food

Results from table 1 show that the students agreed (3.21 ± 1.22) that they would want some of the meals on their school menu changed. The students agreed (3.03 ± 1.08) that they eat a balanced meal from the dining hall. The students agreed $(3.00\pm0.55 \text{ points})$ that they knew what a balanced diet is. The students also agreed (3.00 ± 0.56) that the menu provided them with a variety of foods.

The menu plan comes into play to ensure a balance in the provision of meals offered to the public. Menus, which can simply be described as a list of dishes served at a meal, can also be explained in different terms depending on the settings of the user. Wansink et al. [22] explained a menu as a list or a card that documents the food and beverage options being offered. Menu planning means composing a series of dishes for a meal. Composing a good menu is an art and requires careful selection of dishes for the different courses so that each dish harmonizes with the other. According to Schakel et al., [23], foods such as bread, some cereals, fruits, yams, rice, and vegetables are sources of complex carbohydrates. Adolescent students should use these foods as the major sources of energy supply for their normal body functions and activities because the energy they provide is the best and they take longer to digest [24]. The respondents disagreed (2.64 ± 1.36) that the time between meals is too much. This implies that students did not view the meals as well planned and so not nutritious for them. The students also disagreed (2.47 ± 1.32) that they felt nourished after eating.

According to Kivela [25], the planning of meals in commercial catering establishments is based more on economic considerations and reputation than on the desire to provide nutritionally balanced diets. The dishes produced are intended to please the eye and the palate. The planning of the menu for school feeding has a different aspect where nutritious

and well-balanced foods are compiled. Kivela [26] further noted that menus should provide nutritious food, foods that tempt the appetite, and satisfy the consumers. A lot of considerations go into preparing the menu for feeding students, especially those in boarding houses. Though the focus of catering services in schools is to provide a balanced diet to aid the nutritional needs of students, matrons and domestic bursars take into consideration the availability of foodstuffs, their cost, and the acceptability of the food by consumers. This issue brings about some variation in the nutritional content of food for students in various regions of Ghana.

The students strongly disagreed that they ate fruits, proteins, eggs, and meat each day. They also strongly disagreed that they did not like the meals served at the school. With the absence of fruits and proteins, which are required for the growth of students, it can be concluded that the schools do not provide students with the needed meals. These types of foods help students grow. Results from this data are in agreement with a study that was carried out in Nigeria to assess the nutritional status of boarding school students. Results from that study showed that the students were malnourished with inadequate energy intake, especially among the younger children [27]. The issue of protein-rich foods also confirms the work of Fulkerson et al., [28], which reveals that meals for adolescents should contain vitamins and first- and second-class proteins. A study by [29] however suggests that a balanced meal is the consumption of palatable food that builds the body regardless of the nutrients it contains.

Table 1: Perception of Students nutritional value of meal

Statement	Mean	Standard
		deviation
The school menu always provides us a variety of foods	3	0.56
We like all meals provided in the school	1.62	0.70
We eat protein everyday	1.55	0.60
We eat fruits	1.45	0.62
We eat balanced meal from the school dining hall	3.03	1.08
The time in between meals; that is breakfast lunch and super is too much	2.65	1.36
We feel nourished any time we eat breakfast, lunch and super	2.47	1.32
Would you like some of the meals on the school menu be changed	3.21	1.22
Do you often eat eggs and meat from the schools dining say three		0.00
times	1.62	0.89
I know what a balanced diet is	3.00	0.56

(Field survey, December, 2020) (Legend: (1-1.9: Strongly disagree), (2-2.9: Disagree), (3-3.9: Agree), (4: Strongly agree))

Students Satisfaction with food Service offered them in SHS

The time spent serving meals was rated by the students. Results from figure 5 (table 3, appendix) agreed (3.07 ± 0.61) that food at the school was always served on time. The students also agreed (3.00 + 0.56), that the school's menu had a variety of foods. The students, however, disagreed (2.31 + 0.84) that the food served at the school was enough for them. The results also disagreed (2.82 + 0.81), that the cans used in serving food to the students were enough. The availability of tables and chairs in an eating area is key to addressing food safety concerns. This is in agreement with the work of [30]. These authors agree that the cleanliness of an eating area is measured by its immediate environment. These include the dining table, which is important because that's where the food is placed. The availability of dining tables during meals communicates volumes of information to the customer. This determines if the food itself will be hygienic. In the case of the schools studied, the limited number of dining

tables makes it possible for them to be cleaned. Studies by [31] in Ghana show that in canteens at the University of Ghana, tables have been provided for customers to dine.

Students from the schools also strongly disagreed (1.62 + 0.70) that they liked all the meals served in the school. Students again strongly disagreed (1.77 + 0.56) that the number of students on each table was more than the quantity of food served on the table. The students also strongly disagreed $(1.95 \ 0.56)$, saying 0.74) that the dining tables and chairs are enough for the students. The respondents again strongly disagreed (1.57 + 0.58) that the quality of food served was satisfactory. The students further strongly disagreed (1.55 + 0.60) that they eat proteins every day. The students strongly disagreed (1.45 + 0.62) that they eat fruits in school. The students express dislike for the foods served at the school. This desire shows that these adolescents need more food for development than what the school authorities are currently providing. Studies by [32], show that the right meals contribute to the energy and nutrient intake of Ghanaian school children. Consequently, it is probable that without healthy meals, many children will not be able to meet their daily nutrient requirement. This is because any nutrient lost will be difficult to compensate for when conscious effort is not made to replace the lost nutrients.

Intiful and Lartey [32] conclude that meals are ways to ensure that adolescents acquire their daily nutrient and energy intakes. Food service operators are expected to ensure that they enhance their meals to attain the needed nutritional status. A study by Olumaikaiye et al. [33] on food consumption concluded that students who ate snacks had a higher body weight than their counterparts who failed to take snacks.

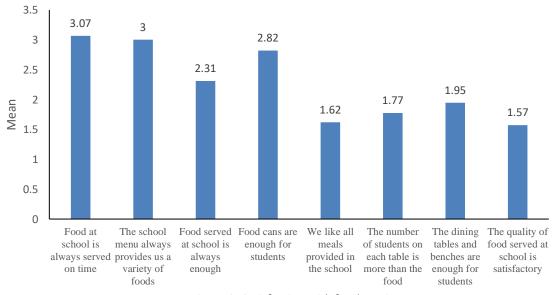


Figure 3: Satisfaction with food services

(Field survey, December, 2020) (Legend: (1-1.9: Strongly disagree), (2-2.9: Disagree), (3-3.9: Agree), (4: Strongly agree))
CONCLUSION

The purpose of the study was to investigate students' perception of food service quality in selected second cycle institutions in Bolgatanga Municipality. The study revealed that students' ate fruits, eggs, and meat each day, yet, did not like the meals served at school due to the fact that the required quality and quantity of ingredients are less. It was further revealed that students are served with weevil infested beans and this makes them lose appetite and resort to other options which they think can cater for their nutrition. The findings are useful in forecasting satisfaction among second cycle students and offer substantial empirical backing

for the importance-performance approach, which presupposes that students would be satisfied with their education. When an attribute is not as important as one may think, student happiness will be less affected by its performance.

RECOMMENDATIONS

- The kitchen staff should make sure that meals prepared meet the nutritional demands of students for healthier growth.
- The government should make sure the buffer stock supplies a variety of foodstuffs in time so that the menu can be followed.
- The free senior high school secretariat should constantly monitor the activities of the kitchen department of senior high schools to ensure quality and satisfied meals are served to students.

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