

Factors Influencing Food Service Quality in Ghanaian Polytechnics

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Abstract

The aim of the study was to assess factors influencing food service quality in Ghanaian polytechnics. Service quality and customer satisfaction have been identified as key elements of the service-profit chain. A mixture of an exploratory and descriptive research designs were employed to study 250 respondents. Data was analysed using statistical tools such as the Statistical Package for Social Sciences (SPSS). The study revealed that all the service quality variables (tangibles, reliability, responsiveness, assurance and empathy) were positively related to customer satisfaction which indicates the higher the service quality, the higher customer satisfaction. The analysis of respondents' expectations scores suggested that the most important expectations items were "accurate bill (3.18)", "clean rest rooms (2.94)", "clean, neat and appropriately dressed staff (2.46)" and "clean dining areas (3.34)", which fall under the dimensions reliability and tangibles. In conclusion, customers were not sure whether the physical facilities, equipment and appearance of the personnel of the restaurants (Tangibles) were attractive. The study recommends that improving service quality in restaurant settings will not only increase customer satisfaction and strengthen customer loyalty, but also improve the restaurant's reputation and generate greater revenue.

Keywords: Service Quality, Customer Satisfaction, Restaurants, Polytechnic

1. Introduction

The restaurant industry in Ghana, especially on campuses or in schools is gaining grounds. Ghana boasts of a wide selection of both local and international restaurants particularly across the length and breadth of the country providing a range of goods and services that is of immense benefit to majority of Ghanaian student customers (Porter & Cant, 2009). Again, this industry is on the rise, because the Ghanaian way of life is experiencing a metamorphosis. Those at the mercy of this upsurge in the restaurant industry are consumers, especially students who patronize the delicacies of these restaurants, for example in schools. With Ghanaian consumers' expectation for quality food which is reasonably priced seemingly been on the rise, it is of essence that owners of restaurant treat fairly the issue of customer satisfaction with the utmost importance it deserves and from the perspective of the consumer, since the customer is the final arbiter of how much to spend and where, when and what to eat (Andaleeb & Conway, 2006). Restaurants in polytechnics represent a considerable market that so far has failed to capture the attention of researchers. These restaurants have experienced increased competition and growing expectations of customers concerning service quality. There has been a need to encourage local consumption, attract the arrival of visitors, and recognize the customers' wants and meet their needs. Therefore, the aims and objectives of this study is to assess the quality of food services provided by these schools, especially restaurants in the public polytechnics in order to determine whether these food services meet the acceptable standards and specification for foods.

According to Wishna (2000), there are five levels (types) of customer's expectations, ranging from minimum tolerable expectations, through acceptable expectations, experience-based norms, normative "should" expectations to ideal expectations or desires. In this study the term expectations is used to describe what customers believe about the capability of the service provider. Specifically, expectations represent what customers feel a restaurant should offer. Mohsin *et al.* (2005) revealed that value for money, variety and quality of the products available, staff-related skills, staff presentation and manners, and well-timed service were ranked as the five most important expectations of customers in New Zealand restaurants and cafes. The quality of service in the restaurant industry is difficult to evaluate, because the assessments are made not only on the service outcome, but also on the process of service delivery. Wu and Liang (2009) stated that service encounter in restaurant settings consists of three main elements: environmental elements (e.g. design, music, lighting), employees (e.g. professional skills, reliability) and customers (e.g. interaction with other customers). To understand all characteristics of the restaurant service quality an appropriate measurement instrument should be developed. Several authors concurred that service quality can be measured by comparing the expectations of customers with their perception of the actual service performance (Grönroos, 1983; Lehtinen & Lehtinen, 1982; Parasuraman *et al.* 1985, 1988; Barrington & Olsen, 1987).

One of the well-tested instruments available to measure service quality from the customer's perspective is the SERVQUAL instrument. It was developed by Parasuraman *et al.* in 1985. The instrument contains two sections. One section consists of 22 items that measure consumers' expectations. The other section includes 22

corresponding items that measure consumers' perceptions of the service they received. The 22 statements represent the five service dimensions that consumers use to evaluate service quality: tangibles, reliability, responsiveness, assurance and empathy. In the SERVQUAL instrument the service quality measurement is based on the comparison of customers' expectations and their perceptions of delivered service. The difference between expectations and perceptions scores is called the SERVQUAL gap. A negative gap indicates that received service did not meet customers' expectations. On the contrary, a positive gap indicates that customers perceived that service delivery exceeded their expectations. The instrument has received serious academic attention, because it represents a useful tool for monitoring and assessing a service provider's performance. Furthermore, several studies were conducted in the context of service quality and customer satisfaction relationship in restaurant settings. Andaleeb and Conway's (2006) research showed that customer satisfaction was significantly influenced by the responsiveness of the employees, price and food quality. Kim *et al.* (2009) found out that five extracted restaurant dimensions (food quality, service quality, price and value, atmosphere and convenience) had a significant effect on overall customer satisfaction. Wu and Liang (2009) reported that restaurant employees positively affect customer satisfaction. The findings of Liu and Jang (2009) indicated that food quality (taste, food safety, menu variety, food presentation), service reliability, environmental cleanliness, interior design, and neat and well dressed employees significantly influenced customer satisfaction.

Previous studies on customer expectation and service-quality perception in the food service industry have revealed certain important attributes, such as low price, food quality (food taste and nutritional properties), value for money, service, location, brand name, and image (Johns & Howard, 1998; Tam & Yung, 2003). More specifically, the fundamental factors that contribute to customer satisfaction in restaurants include the food (hygiene, balance, and healthiness), physical provision (layout, furnishing, and cleanliness), the atmosphere (feeling and comfort), and the service received (speed, friendliness, and care) during the meal experience (Johns & Pine, 2002). It is against this background that the study seeks to assess the quality of food services provided by restaurants in five public polytechnics in Ghana based on the SERVQUAL model.

2. Research Methodology

Both exploratory and descriptive research designs involving both qualitative and quantitative methods were used for this study. The research was carried out in five polytechnics in Ghana. These were, Takoradi Polytechnic, Koforidua Polytechnic, Accra Polytechnic, Cape Coast Polytechnic and Ho Polytechnic.

A multi-stage sampling technique was used to select the 250 customers. Since there are ten (10) polytechnics in the country and are mostly homogeneous, a cluster sampling was used to select five (5) polytechnics. This was done by writing the names of the polytechnics on pieces of paper. The papers were then folded and shuffled. Five (5) polytechnics were then selected at random as the clusters. A disproportionate stratified random sampling procedure was used to select fifty (50) customers from each of the five (5) polytechnics. In stratified random sampling, a population is first divided into subgroups, called strata, and a sample is selected from each stratum. This method was used since different cohorts or strata mentioned above were used. Again within each stratum or restaurant, customers were selected based on their arrival with a ten minute intervals. That is, ten minutes interval between one customer's arrivals to the other. The input process is usually called the arrival process. Arrivals were called customers.

Questionnaire was the major instrument used to collect the data. The questionnaire was used in order to get standard form of answers. The number of questionnaires that the researcher sent out was much larger than the sample size chosen because provision was made for unreturned questionnaires as well as those questionnaires rendered unusable for analysis. The restaurants of each of the five polytechnics were visited in order to interview the customers with the questionnaires. The questionnaires were collected same day as and when the interview was going on. The Statistical Package for Social Sciences (SPSS) and Microsoft Excel Software were used to analyze data obtained from the survey.

3. Results and Discussion

3.1 Demographic Characteristics

The total number of respondents studied was 250 which comprised 50 customers each from Accra, Cape Coast, Ho, Koforidua and Takoradi Polytechnics' canteens or restaurants. Out of the 250 customers studied, only 50 representing 20% were males. This signifies that majority (80%) of the customers studied were females. The most dominant age group was between 25 - 34 years, representing 52% of the respondents studied. This was followed by age group 18-24 years representing 28%. The least age representation was those between 35 - 44 years and they constituted 20%. The study found out that majority (64%) of the respondents was HND (Higher National Diploma) or first degree holders while 28% of them were diploma holders with few (8%) of them who had masters degree.

3.2 Customers' Expectations and Perceptions of Service Quality in Restaurant Settings

The analysis and interpretation revolves around customers' expectations and perceptions of service quality in restaurant settings. Table 1 represents the tangibility of the food services provided by the restaurants. Tangibility encompasses physical facilities, equipment and appearance of the personnel of the restaurants. It appears from the study that customers were not sure whether the tangible facilities of the places they have their meals or the restaurants were attractive. This is because, they claimed that the dresses of the staffs were not clean, neat and attractive as indicated by the weighted ranked mean in table 1. They also claimed that the restaurants' decors were not typical to their image and price ranges. Their menus were also not readable to even say that they are attractive. Meanwhile, they were not sure whether their dining areas were comfortable. The standard deviation however indicates that the variations in the views of the customers were insignificant.

Table 1: Mean and Standard Deviation of the Tangibility of the Services Provided

Attribute: Tangibles	Mean	Interpretation	Std. Deviation
Visually attractive parking areas and building exteriors.	2.78	Neutral	1.156
Visually attractive dining area.	2.80	Neutral	1.186
Clean, neat and appropriately dressed staff.	2.46	Disagree	1.317
Restaurant's decor typical to its image and price range.	2.42	Disagree	1.187
Easily readable menu.	2.38	Disagree	1.297
Visually attractive menu.	2.22	Disagree	1.272
Comfortable dining area.	3.04	Neutral	1.251
Clean rest rooms.	2.94	Neutral	1.320
Clean dining areas.	3.34	Neutral	1.196
Comfortable seats in the dining room.	2.84	Neutral	1.104
Overall Average (Tangibles)	2.72	Neutral	1.229

Note: Mean of: 1 = strongly disagree; 2 = disagree; 3 = not sure or neutral; 4 = agree, 5 = strongly agree

Source: Field Study 2014

Reliability shows the ability to perform the promised service dependably and accurately. The weighted rank mean of the reliability of the food services provided by the restaurants is represented in Table 2. According to the study, customers claimed that the services provided by restaurants were not reliable. The customers were not sure whether the services provided by the restaurants were dependable and consistent. They were also not sure whether the bills provided by the restaurants were accurate. However, they stated that the services are not provided on time and the staffs are not quick in correcting wrong services. It was based on these perceptions from the customers that resulted in the above claim. The standard deviation however indicates that the variations in the views of the customers were insignificant.

Table 2: Mean and Standard Deviation of the Reliability of the Services Provided

Attribute: Reliability	Mean	Interpretation	Std. Deviation
Service in the promised time.	2.14	Disagree	1.022
Quick correction of wrong service.	2.38	Disagree	1.343
Dependable and consistent restaurant.	2.52	Neutral	1.448
Accurate bill.	3.18	Neutral	1.110
Error-free served order (food).	2.06	Disagree	1.010
Overall Average (Reliability)	2.46	Disagree	1.187

Note: Mean of: 1 = strongly disagree; 2 = disagree; 3 = not sure or neutral; 4 = agree; 5 = strongly agree

Source: Field Study 2014

Responsiveness reflects the willingness of the service providers to help customers and provide prompt service. The weighted ranked mean of the responsiveness of the food services provided by the restaurants is represented in Table 3. It appears from the study that the responsiveness of the services provided by the restaurants were not good. This is because; the restaurants do not maintain their speed and quality of services during busy times. They do not also provide their services promptly. Moreover, they were not sure whether they provide extra effort for handling special requests.

Table 3: Mean and Standard Deviation of the Responsiveness of the Services Provided

Attribute: Responsiveness	Mean	Interpretation	Std. Deviation
Maintaining speed and quality of service during busy times.	2.16	Disagree	1.086
Provision of prompt service.	2.34	Disagree	1.144
Extra effort for handling special requests.	2.76	Neutral	1.212
Overall Average (Responsiveness)	2.42	Disagree	1.147

Note: Mean of: 1 = strongly disagree; 2 = disagree; 3 = not sure or neutral; 4 = agree; 5 = strongly agree
 Source: Field Study 2014

Assurance involves knowledge and courtesy of employees and their ability to inspire trust and confidence. Based on the weighted rank mean result in Table 4, the assurance of the services provided by the restaurants are very poor. This is because; most of the staff cannot answer questions completely. They were also not sure whether they feel safe in patronizing food from these restaurants. The standard deviation however indicates that the variations in the views of the customers were insignificant.

Table 4: Mean and Standard Deviation of the assurance of the services provided

Attribute: Assurance	Mean	Interpretation	Std. Deviation
Employees can answer questions completely.	2.24	Disagree	1.126
Comfortable and confident feeling	2.50	Neutral	1.190
Staff provides information about menu items, their ingredients, and method of preparation.	2.16	Disagree	1.241
Feeling safe.	2.90	Neutral	1.027
Well-trained, competent and experienced staff.	2.62	Neutral	1.471
Overall Average (Assurance)	2.48	Disagree	1.211

Note: Mean of: 1 = strongly disagree; 2 = disagree; 3 = not sure or neutral; 4 = agree; 5 = strongly agree

Source: Field Study 2014

Table 5 represents the weighted rank mean of the empathy of the food services provided by the restaurants. Empathy is caring, individualized or customized attention the organization provides for its customers. According to the study, the empathy of the services provided by the restaurants was poor. This is because; the staffs do not support the customers which makes them to pay more than what they have planned. The standard deviation however indicates that the variations in the views of the customers were inconsequential.

Table 5: Mean and Standard Deviation of the Empathy of the Services Provided

Attribute: Empathy	Mean	Interpretation	Std. Deviation
Restaurant supports the employees.	2.32	Disagree	1.242
Employees provide individual attention.	2.54	Neutral	1.137
Special feeling.	1.96	Disagree	1.097
Anticipation of customers' individual needs and wants.	2.56	Neutral	1.119
Sympathetic and reassuring employees.	2.54	Neutral	1.239
Customers' best interests at heart.	2.46	Disagree	1.362
Expensive food items.	2.62	Neutral	1.430
Paying more than planned.	2.36	Disagree	1.248
Overall Average (Empathy)	2.42	Disagree	1.234

Note: Mean of: 1 = strongly disagree; 2 = disagree; 3 = not sure or neutral; 4 = agree; 5 = strongly agree

Source: Field Study 2014

The overall weighted rank mean as represented in Table 6 indicates that, there was not enough evidence to state that the quality of the services provided by the restaurants was poor. This is because, they were not sure (that is 2.5 weighted rank mean is equivalent to 3 which represents not sure). The standard deviation however indicates that the variations in the views of the customers were trivial.

Table 6: Mean and Standard Deviation of the General Quality of the Services Provided

Attribute	Mean	Interpretation	Std. Deviation
General Quality of the services provided	2.50	Not sure	1.202

Note: Mean of: 1= strongly disagree; 2= disagree; 3= not sure or neutral; 4 = agree
 5 = strongly agree

Source: Field Study 2014

Customer satisfaction is customer's overall evaluation of the performance of an offering to date. It appears from the study as represented in Table 7 indicates that customers were not sure whether they were satisfied with the services provided by the restaurants. This is because; they were not sure whether they will visit these restaurants again. They were also not sure whether they will recommend these restaurants to colleagues,

friends or family members. Moreover, they were not satisfied with the services provided. The standard deviation however indicates that the variations in the views of the customers were insignificant.

Table 7: Mean and Standard Deviation of Customer Satisfaction

Attribute: Customer Satisfaction	Mean	Interpretation	Std. Deviation
Overall satisfaction with dining experience.	2.42	Disagree	1.331
Returning to the restaurant.	2.68	Neutral	1.226
Recommending the restaurant to others.	2.66	Neutral	1.454
Excellent quality of service.	2.26	Disagree	1.470
Overall Average (Customer Satisfaction)	2.51	Neutral	1.370

Note: Mean of: 1= strongly disagree; 2= disagree; 3= not sure or neutral; 4 = agree
 5 = strongly agree

Source: Field Study 2014

3.3 Relationship between Quality Food Service and Customer Satisfaction

The analysis and interpretation revolves around the relationship between food service quality and customer satisfaction. Table 8 represents the Spearman's correlation between service quality and customer satisfaction. According to the result, all the service quality variables (tangibles, reliability, responsiveness, assurance and empathy) were positively related to customer satisfaction. Empathy ($r=0.734$) had the highest correlation with customer satisfaction followed by assurance ($r=0.670$), tangibles ($r=0.559$), responsiveness ($r=0.369$) and reliability ($r=0.318$). Besides, all the correlations were significant since their P-values were less than 0.01 (the significance level). This indicates that, the higher the service quality, the higher customer satisfaction, which is in accordance with Cronin & Taylor (1994) study which stated that service quality is an antecedent factor determining customer satisfaction.

Table 8: Nonparametric Correlations (Spearman's rho)

Variables	Statistics	1	2	3	4	5	Customer Satisfaction
Tangibles (1)	Correlation Coefficient	1.000	.609**	.618**	.727**	.592**	.559**
	Sig. (2-tailed)	.	.000	.000	.000	.000	.000
	N	250	250	250	250	250	250
Reliability (2)	Correlation Coefficient	.609**	1.000	.629**	.649**	.546**	.318**
	Sig. (2-tailed)	.000	.	.000	.000	.000	.000
	N	250	250	250	250	250	250
Responsiveness (3)	Correlation Coefficient	.618**	.629**	1.000	.666**	.515**	.369**
	Sig. (2-tailed)	.000	.000	.	.000	.000	.000
	N	250	250	250	250	250	250
Assurance (4)	Correlation Coefficient	.727**	.649**	.666**	1.000	.762**	.670**
	Sig. (2-tailed)	.000	.000	.000	.	.000	.000
	N	250	250	250	250	250	250
Empathy (5)	Correlation Coefficient	.592**	.546**	.515**	.762**	1.000	.734**
	Sig. (2-tailed)	.000	.000	.000	.000	.	.000
	N	250	250	250	250	250	250
Customer Satisfaction	Correlation Coefficient	.559**	.318**	.369**	.670**	.734**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.
	N	250	250	250	250	250	250

Note: ** Shows that the Correlation is significant at the 0.01 level (2-tailed).

Source: Field Study 2014

Conclusion

It can be concluded from the study that, customers were not sure whether the physical facilities, equipment and appearance of the personnel of the restaurants (Tangibles) were attractive. Moreover, their ability to perform the promised service dependably and accurately was not reliable (Reliability). Besides, the willingness of the service providers to help customers and provide prompt service (Responsiveness) was also considered to be poor. Again, the knowledge and courtesy of employees and their ability to inspire trust and confidence (Assurance) were also rated to be poor. Also, the care and individualized or customized attention the organization provides for its

customers (Empathy) were rated as poor. However, the overall weighted rank mean indicates that, there was not enough evidence to state that the quality of the services provided by the restaurants was poor. It appears from the study that customers were not sure whether they were satisfied with the services provided by the restaurants. All the service quality variables (tangibles, reliability, responsiveness, assurance and empathy) were positively related to customer satisfaction which indicates that, the higher the service quality, the higher customer satisfaction.

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