

Research Article

Enhancing Employee Responsiveness to Non-Communicable Diet Related Diseases and Customer Satisfaction in Port Harcourt Quick Services Restaurants

Opubo Clifford Opusunju ¹, Esther Joseph Azubuike ², Joy Johnson ²

¹ University of Port Harcourt, Nigeria

² PAMO University of Medical Sciences, Nigeria

*Correspondence: opubocliffordopusunju@gmail.com

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Abstract:

The aim of this study of is to investigate the impact of employee responsiveness on non-communicable diet-related diseases and customer satisfaction in quick service restaurants. This descriptive study was conducted in Port Harcourt, Rivers State, Nigeria with the following quick-service restaurants (QSRs), Kilimanjaro, Genesis Fast-food Restaurants, Chicken Republic, Kentucky Fried Chicken Fast-food, and Domino's Pizza. 206 participants from 20 years and above representing a diverse demographic comprising male and female. The gender distribution of respondents showed a slight male majority (56.3%), with females making up 43.7%, percentage distribution of age 38.3% (31-40), 35.4% (21-30) age group, 99.0% had tertiary education, 80.6% visited QSRs monthly, with Kilimanjaro being the most popular (37.9%), followed by Genesis and Chicken Republic. The impact of employee responsiveness on consumer satisfaction in quick service restaurants, focusing on non-communicable diet-related diseases based on gender, the t-test result shows no significant difference between male and female responses. Independent t-test of customers' recommendations for improving Quick Service Restaurants' responsiveness to Non-Communicable Diet-Related Diseases showed statistical significance with female having higher ratings. The mean ratings across different age groups on how employee responsiveness affects customer satisfaction was not statistically significant 51-60 age group was highest while <21 age group was lowest and ANOVA result showed no statistical significance across age groups How different age groups rated their recommendations for improving responsiveness to diet-related diseases. <21 and 21-30 age groups have the highest mean ratings >60 groups gave the lowest rating with statistical significance.

Keywords: Employee responsiveness, Non-communicable diet-related diseases, Customer satisfaction, Quick-service restaurants, Consumer demographics

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Introduction

In today's dynamic business landscape, a company's ability to respond swiftly has become a key factor in maintaining competitive advantage (4). Organizational responsiveness allows firms to detect shifts in the market rapidly, adapt their operations to meet emerging demands, share information across departments, optimize information-processing capabilities, and implement new product and process technologies before competitors (4). This adaptability is crucial for companies to seize market opportunities, stay competitive, achieve sustainable growth, and ensure long-term viability (52). In the quick-service restaurant sector, responsiveness is essential for boosting customer satisfaction and loyalty (6). With growing competition in this industry, businesses need to focus more on retaining existing customers than merely attracting new ones (6). This emphasis is particularly relevant in Nigeria, where a

rise in non-communicable diseases (NCDs) related to poor dietary choices has become a public health issue (5). The World Health Organization (WHO) has highlighted NCDs as a major global health concern, accounting for 70% of deaths worldwide, with low- and middle-income countries, such as Nigeria, facing the highest impact.

The trend of fast-food consumption has surged in Nigeria, especially in urban areas like Port Harcourt, contributing to the prevalence of NCDs. Fast food has become a staple in Nigerian culture, particularly among younger and middle-aged demographics, who are increasingly adopting Western dietary and lifestyle patterns. This shift is linked to rapid urbanization, globalization, and evolving dietary habits, which have driven up the demand for quick, affordable meal options (50). To combat these challenges, quick-service restaurants need to enhance staff responsiveness to NCD-related dietary concerns and improve customer satisfaction. This can be achieved by offering healthier food choices, emphasizing food safety, and creating regulatory frameworks to guide industry practices (32). Proper nutrition is crucial in the prevention and management of NCDs and can mitigate the risks of chronic diseases such as heart disease, diabetes, and stroke (38).

Food quality is a pivotal factor influencing customer choices in restaurants, with patrons often prioritizing quality when selecting dining options. It remains one of the most significant factors affecting customer satisfaction and loyalty, helping to foster customer retention and loyalty (31). Therefore, for quick-service restaurants to thrive, they must continually improve their food quality to drive patronage and ensure long-term success (31).

In Port Harcourt, fast food has become a common lifestyle choice, with many outlets offering processed foods high in salt and fat. To improve employee responsiveness toward diet-related NCDs and enhance customer satisfaction, quick-service restaurants should prioritize nutritious offerings, lower added sugars, salt, and saturated fats, and promote healthier dietary practices (50). By adopting these measures, they can contribute to reducing NCDs, supporting sustainable growth, and securing long-term success, as this study aims to explore the effects of employee responsiveness on diet-related NCDs and customer satisfaction in quick-service restaurants.

Research Objectives

The broad objective of this paper is to evaluate consumer perspectives on Quick Service Restaurants' practices and challenges in addressing Non-Communicable Diet-related Diseases in Port Harcourt. However, the specific objectives are:

1. To analyze the impact of employee responsiveness on consumer satisfaction within the context of Non-Communicable Diet-Related Diseases in Quick Service Restaurants.
2. To assess the customers' recommendations that measures the improvement of Quick Service Restaurants' responsiveness in addressing Non-Communicable Diet-Related Diseases.

Research Questions

The research questions are as follows:

1. What is the impact of employee responsiveness on consumer satisfaction within the context of Non-Communicable Diet-Related Diseases in Quick Service Restaurants?
2. To what extent do customers' recommendations measure the improvement of Quick Service Restaurants' responsiveness in addressing Non-Communicable Diet-Related Diseases?

Research Hypothesis

Hypothesis 1 (H1):

There is a significant positive relationship between employee responsiveness to Non-Communicable Diet-Related Diseases and customer satisfaction in Quick Service Restaurants in Port Harcourt.

Hypothesis 2 (H2):

Customers' recommendations for improving Quick Service Restaurants' responsiveness to Non-Communicable Diet-Related Diseases significantly impact their overall satisfaction and loyalty.

Justification of the Study

The global surge in non-communicable diet-related diseases (NCDs) has created an urgent demand for practical solutions. Poor dietary habits, marked by excessive intake of salt, sugar, and fats, alongside insufficient consumption of fruits, vegetables, and whole grains, stand as a primary risk factor for obesity and NCDs, contributing to 40% of global NCD-related deaths (10). In Nigeria, the likelihood of premature death from the four major NCDs between ages 30 and 70 is 20% (56). Recognizing the severe health, social, and economic repercussions of unhealthy diets, the Nigerian government has shown growing interest in implementing policy interventions. This study aims to support the development of focused policy measures by examining consumer views on Quick Service Restaurants' (QSRs) approaches and obstacles in addressing NCDs. Insights into consumer behavior and preferences can help shape policies that positively impact diet quality in Nigeria.

The hospitality sector, especially QSRs, faces diverse shifts within an intensely competitive landscape, where adaptability is essential for maintaining a competitive edge and quickly responding to market dynamics. This study seeks to pinpoint factors within QSRs that enhance their capacity to respond to customer preferences and market changes. On a global scale, dietary and nutritional shifts have intensified chronic disease rates, with developing nations seeing similar patterns (42). The rise in consumption of processed and packaged foods has driven an increase in NCDs, prompting industry stakeholders to reassess and realign operations towards healthier options. Through the QSR sector, this study aspires to offer practical, evidence-based solutions to lessen the NCD burden in Nigeria. By exploring consumer perspectives and QSR responsiveness, the research will provide valuable guidance to policymakers and industry leaders on strategies to promote healthier eating habits and reduce NCD risk.

Background Literature

Employee Responsiveness

Employee responsiveness is a critical aspect of service quality, referring to the ability of service providers to promptly address customer concerns and deliver timely service (15). In the fast food restaurant industry, where demand is ever-existing and increasing, responsiveness encompasses the preparedness to help customers and provide prompt service, which is essential for building satisfaction and good relationships.

Studies have constantly shown that responsiveness is a key indicator of quality service. The capacity to help customers tackle their concerns significantly influences their perception of service quality (14, 13). Responsiveness involves responding to customers' needs in terms of quality, speed, and flexibility (12).

From a service-marketing perspective, responsiveness relates to the readiness to help customers and speed of service delivery (43). Conversely, from an operations management perspective, it involves the speed and variety of products offered (43). This study views responsiveness from both perspectives, focusing on the ability of firms to provide a variety of services speedily and help customers in service delivery processes (12).

Organizational responsiveness is a aspect of market orientation, representing the organization's swift response to market intelligence about customer needs, threats, and opportunities (4). It entails the capacity to respond to environmental challenges, which is a strategic

challenge for most firms (54). According (4) and 54), environmental scanning, strategic planning, flexible manufacturing infrastructures, supply chain governance mechanisms, and multi-skilled workers inform responsiveness.

In the context of diet-related non-communicable diseases, employee responsiveness is essential in addressing customer concerns and providing healthy food options. By exploring employee responsiveness, this study aims to contribute to the development of effective strategies for quick service restaurants to promote healthy dietary habits and reduce the risk of non-communicable diseases.

Non-Communicable Diseases Linked to Diet Impacting Consumers

Non-communicable diseases (NCDs) represent a set of chronic conditions that are not infectious but significantly decrease life quality and can lead to fatal outcomes (29). Currently, NCDs are the foremost cause of death globally, accounting for 70% of worldwide fatalities, translating to 40 million lives lost annually. The health and economic consequences of this trend are substantial, with premature mortality and impaired life quality affecting millions and nations experiencing diminished productivity and hindered economic growth (29). The widespread rise in obesity, suboptimal diets, and ongoing malnutrition are major drivers of this crisis. Every nation contends with the dual challenges of malnutrition and NCDs, with almost 80% of NCD-related deaths occurring in low- and middle-income nations. In Africa, the prevalence of NCDs is escalating swiftly and is expected to surpass communicable, maternal, perinatal, and nutritional diseases as the primary cause of mortality by 2030 (29).

In Nigeria, a national survey on NCDs conducted from 1990 to 1992 found hypertension prevalence at 11.2% and diabetes mellitus at 2.7% (affecting approximately 1.05 million Nigerians over 15 years old). In the next decade, NCD rates are anticipated to increase by 17% in developed nations and by 27% in developing regions, especially within Africa (29). Projections suggest that managing NCDs will constitute over 30% of healthcare expenses within the next 10 years (29).

NCDs especially cardiovascular diseases, common cancers, respiratory ailments, diabetes, and dementia—are frequently linked to disability (35). Among the primary risk factors driving most NCDs, poor diet emerges as the most significant, surpassing the combined impact of tobacco use, alcohol consumption, and physical inactivity (28). Worldwide, a rising intake of processed foods high in sugar, salt, saturated, and trans-fats, coupled with low consumption of nutritious foods, has fueled the growth in NCD rates (28). Efforts to counteract NCDs through dietary improvements include both individual-focused “downstream” behavioral interventions and broader “upstream” policies aimed at fostering healthier environments (16). Globally, various “upstream” policy strategies have been introduced to encourage better eating habits and reduce diet-related NCDs. These policies address pricing, promotion, availability, nutritional content, labeling, supply chain, trade, and investment factors (21).

To aid policy decisions, clear evidence is required on the prospective population benefits, feasibility, and cost-effectiveness of these interventions (16). Food service providers, including quick-service restaurants, should aim to offer a diverse food selection to accommodate different age groups and demographics, such as infants, children, adolescents, adults, pregnant and nursing women, and the elderly. Acknowledging the influence of diet on NCDs, the Nigerian government developed the National Nutritional Guideline on Non-Communicable Disease Prevention, Control, and Management to promote good nutrition as a preventive and management tool for NCDs (22). This guideline is intended for broad use by the general public, including households, healthcare providers, educational institutions, corporations, food industries, eateries, hotels, and restaurants (22).

Customer Satisfaction in Quick Service Restaurants

Pairot defined customer satisfaction as an organization’s ability to meet the commercial, emotional, and psychological needs of its customers. The diversity in customer satisfaction levels presents a challenge for businesses in understanding and meeting these varied requirements (33). As a key metric, customer satisfaction measures the degree of fulfillment customers experience from a company’s products or services. In the quick-service restaurant

industry, customer satisfaction is pivotal, as it directly influences the chances of repeat patronage and word-of-mouth recommendations (1, 2). Satisfaction results from customers' evaluation of the perceived quality versus the actual service performance, which leads to feelings of satisfaction or dissatisfaction (1, 2). This reflects the extent to which a customer believes that a specific service will evoke a positive experience.

Customer satisfaction is a psychological response tied to the alignment or misalignment of a customer's perceived service quality both during and after the service encounter. Many studies on customer satisfaction draw upon the expectancy/disconfirmation model, encompassing expectations, performance, disconfirmation, and satisfaction (3). Customer satisfaction can be understood through two lenses: transaction-specific satisfaction (satisfaction from a single purchase event) and cumulative satisfaction (satisfaction based on the aggregate of multiple service experiences over time) (1). It reflects a general judgment on products or services that deliver optimal satisfaction levels for consumers (40). Previous research highlights food quality, service quality, and ambiance as primary determinants of restaurant service quality (17, 47, 44). Food quality, in particular, strongly influences customer satisfaction and behavioral intentions, ranking as the top factor in studies examining consumers' restaurant selection behavior (25). High-quality food is typically described as fresh, well-presented, and flavorful (26,24). The correlation between food quality and customer loyalty reveals that food quality is the leading driver of satisfaction and repeat patronage intentions in full-service restaurants (23). Good food quality contributes to customer satisfaction, loyalty, and ongoing patronage.

In the food service industry, customer patronage refers to the conscious choice to repeatedly purchase food from a specific restaurant rather than exploring other options (7). Factors such as the physical environment, service quality, and food quality all impact restaurant patronage (7). In a Malaysian study, (8) found that food quality, reliability, service quality, pricing, atmosphere, and location were key factors in customers' selection of full-service restaurants. To remain viable, quick-service restaurants must cultivate customer satisfaction that leads to loyalty behaviors (8). Achieving this requires enhancing customer satisfaction and encouraging patronage through high-quality food and service (23). By offering excellent food quality that represents good value, top-tier service, and an ambiance that meets or exceeds customer expectations, quick-service restaurants can increase customer satisfaction and positively influence future behaviors.

Enhancing Quick Service Restaurants Employee Responsiveness to Non-Communicable Diet-Related Diseases (NCDs)

To address the challenges of non-communicable diet-related diseases, a broad array of nutrition-specific and collateral initiatives are required to provide appropriate food to growing populations (58). These initiatives include interventions, programs, and policies that can simultaneously address undernutrition, overweight, obesity, and diet-related NCDs.

Examples of these initiatives include:

- Increasing access to safe drinking water to prevent infectious diseases and obesity (59)
- Investing in production, supply chain logistics, and procurement policies to promote healthy foods (48)
- Restricting advertising and promotional marketing of unhealthy foods, especially in schools (57)
- Implementing front-of-package labeling and fiscal measures that favor healthy foods, such as taxation of sugar-sweetened beverages (55)
- Anchoring these measures in national Food-Based Dietary Guidelines and embedding them in legislation can help protect the right to food and promote the highest attainable level of health (48).

The development and implementation of food-based dietary guidelines (FBDGs) are critical in guiding consumers to make more nutritious food choices and providing the basis for actions across food systems (57). Governments should:

- Monitor food consumption choices and assess these against a science-based standard for high-quality diets
- Provide and regularly update dietary guidelines to inform policy and consumers
- Emphasize the links between healthy eating behavior and environmental sustainability when developing FBDGs
- Educating consumers for healthier dietary choices requires a multi-faceted approach, including:
- Mounting public awareness campaigns that are culturally tailored and engage civil society

Implementing programs on nutrition education that provide adequate opportunities to combine education with access to nutritious foods

- Introducing food labeling policies that enable consumers to make healthier food choices
- Integrating nutrition education into multi-component interventions that aim to increase income and food availability at the household level
- Improving access to higher-quality diets for low-income consumers requires:
- Improving the availability and affordability of micro-nutrient-dense foods such as fruit, vegetables, and bio-fortified products
- Implementing dietary standards and consumer education initiatives that are aligned with literacy campaigns and nutrition education programs

By implementing these initiatives, quick service restaurants can enhance employee responsiveness to non-communicable diet-related diseases and promote healthier dietary choices among consumers.

Theoretical Framework

The Assimilation-Contrast Theory, introduced by (11), serves as the theoretical foundation for this research. The theory explores the intricate relationship between service providers' performance and customers' expectations, emphasizing the reciprocal nature of this interaction. According to the theory, when service providers meet, even partially, customers' expectations, customers tend to overlook any minor differences and accept the service. This is referred to as assimilation. Conversely, when service providers fail to meet customers' expectations, the perceived gap is exaggerated, and the service is rejected, which is known as contrast.

The theory posits that customers have specific thresholds for both acceptance and rejection, which influence their satisfaction with the service. If a service provider meets or exceeds the acceptance threshold, customers will be satisfied. However, if the provider falls short of the rejection threshold, customers will be dissatisfied. This study applies the Assimilation-Contrast Theory to examine how the responsiveness of quick service restaurant employees impacts customer satisfaction and loyalty. By exploring how customers react to the performance of service providers, this research aims to identify strategies that can enhance customer satisfaction and foster loyalty in the quick service restaurant sector. The Assimilation-Contrast Theory offers a valuable lens for understanding the dynamics between service

providers and customers. Through investigating the effects of assimilation and contrast, this study seeks to uncover insights into how quick service restaurants can better align their services with customer expectations and ultimately boost customer loyalty.

Empirical Framework

A number of related research has been conducted along these line. Gautam, Saumya, and Srivastava conducted a study examining the impact of consumers' perceptions on the service quality in the fast-food sector. Service quality is a critical factor for businesses in the service industry, particularly in a highly competitive market. It is essential for firms to implement strategies that ensure improvements in service quality. This report primarily offers a literature review on consumers' perceptions of the service quality in the fast-food sector of Jharkhand, providing an overview of the food service industry, fast food restaurants, and the specific fast-food sector in Jharkhand, while also reviewing research on service quality. The study highlights five key service dimensions that customers value: reliability, responsiveness, assurance, empathy, and tangibles. Furthermore, the research extensively covers service quality within the restaurant industry and offers a conceptualization of service quality in the fast-food sector. The findings suggest that firms in the fast-food industry need to adopt various strategies to maintain high service quality, which could play a significant role in enhancing profitability through several avenues (49).

Mumena and colleagues conducted a study on the relationship between fast-food consumption, dietary quality, and dietary intake among adolescents in Saudi Arabia, highlighting concerns related to the high consumption of fast food and its connection to non-communicable diseases. Despite the growing concern, research on this topic in Saudi Arabia is limited. The study aimed to explore the association between fast-food consumption, dietary quality, and dietary intake in a sample of 617 healthy adolescents aged 11–18 years, randomly selected from 16 middle and high schools in Jeddah and Madinah. Sociodemographic information was gathered from parents, while dietary data, including frequency of fast-food consumption, dietary quality (assessed with a short-form food frequency questionnaire), and dietary intake (assessed via multiple 24-hour diet recalls from a subsample), were collected from the adolescents. Approximately one-third of the adolescents (28.5%) reported frequent fast-food consumption (more than twice a week). The study found that a higher percentage of male adolescents consumed fast food frequently compared to females (32.8% vs. 24.8%, $p = 0.039$). Additionally, adolescents from higher-income families (monthly income >SAR 21,000) reported significantly more frequent fast-food consumption than those from lower-income households ($p = 0.009$). The frequency of fast-food consumption was associated with lower dietary quality (Beta (B) = -0.27 [95% CI: -0.35 to -0.18]) and higher intake of carbohydrates and free sugars (B = 6.93 [95% CI: 0.78 to 13.1], and B = 3.93 [95% CI: 1.48 to 6.38], respectively). The study concluded that nutrition intervention programs are needed to reduce fast-food consumption and improve the dietary quality of adolescents in Saudi Arabia (41).

In a similar context, Hyseni conducted a scoping review on the effectiveness of policy actions aimed at improving population dietary patterns and preventing diet-related non-communicable diseases (NCDs). Their study revealed that poor diet is a greater contributor to the NCD burden than tobacco, alcohol, and physical inactivity combined. The review examined the potential effectiveness of policy actions to promote healthier food consumption and prevent NCDs. It focused on systematic and non-systematic reviews, categorizing data using a seven-part framework: price, promotion, provision, composition, labeling, supply chain, trade/investment, and multi-component interventions. After screening 1805 candidate publications, the review included 58 relevant systematic and non-systematic reviews. The findings indicated that multi-component interventions and price-related policies (e.g., taxes, subsidies) were consistently effective in promoting healthy eating. Reformulating products to reduce industrial trans-fat intake was also highly effective. However, evidence on the food supply chain, trade, and investment policies was limited, suggesting the need for further research. Food labeling and restrictions on the marketing or provision of unhealthy foods were generally less effective, with uncertain long-term sustainability (30). The review emphasizes the growing body of evidence supporting multi-component interventions, taxes, subsidies, elimination of harmful ingredients, and possibly trade agreements as powerful policy tools to improve diet and prevent NCDs, offering clearer implications for policymakers

Materials and Methods

Study Area

The study focuses on Port Harcourt, the capital city of Rivers State, Nigeria. The city has a diverse range of quick-service restaurants, including Kilimanjaro, Genesis Fast-food Restaurants, Chicken Republic, Kentucky Fried Chicken Fast-food, and Domino's Pizza.

Research Design

This study employs a descriptive research design to enhance Employee Responsiveness to Non-Communicable Diet Related Diseases and Customer Satisfaction in Port Harcourt Quick Services Restaurants. Descriptive research design is a type of research methodology used to describe characteristics or behaviors of a population or phenomenon, focusing on observing and documenting the existing state of affairs without attempting to manipulate or control variables.

Study Population

The study targets customers of quick-service restaurants in Port Harcourt, with a sample size of 206 participants, representing a diverse demographic. The population comprises both male and female genders, with ages ranging from 20 years and above, including married and single respondents of diverse occupations, different levels of education, and frequencies of quick-service restaurant visits.

Study Instrument

Data collection involves a combination of primary and secondary sources, including structured questionnaires and interviews (Appendix A). The questionnaire, designed with a summative rating scale ranging from 1 to 5 in Likert scale format, facilitates nuanced responses. Section A of the questionnaire collects demographic information, while Section B addresses specific research inquiries. Secondary data sources, including libraries, journals, articles, textbooks, and online databases, contribute to the literature review and contextual understanding of consumer perspectives on Enhancing Employee Responsiveness to Non-Communicable Diet Related Diseases and Customer Satisfaction in Port Harcourt Quick Services Restaurants

Data Analysis

Data analysis involves organizing data into tables and percentages to present key findings clearly. Statistical techniques like Chi-square and correlation analysis are used to test hypotheses.

Results

The data obtained from the study was analyzed, and the results revealed several key findings. (Table 1 on Frequency distribution of Socio-demographics variable). Firstly, the gender distribution of the respondents showed that 116 (56.3%) identified as male, while 90 (43.7%) identified as female. This indicates a slightly higher proportion of male respondents compared to female respondents, which may be attributed to various factors such as cultural or societal influences, differences in eating habits, or varying levels of health awareness.

Regarding the age distribution, the results revealed that the majority of respondents (79, or 38.3%) fell within the 31-40 age range, which is typically considered middle-aged. This was followed by 73 (35.4%) respondents in the 21-30 age range, who are typically considered young adults. Additionally, 23 (11.2%) respondents were in the 41-50 age range, 21 (10.2%) were below 20 years, and 10 (4.9%) were above 50 years. This suggests that the majority of respondents were middle-aged adults, with a significant proportion in the younger age ranges, which may indicate a higher level of health awareness and concern.

In terms of level of education, an overwhelming majority (204, or 99.0%) of the respondents had a tertiary level of education, indicating a high level of educational attainment among the respondents. Only 2 (1.0%) respondents had a secondary level of education, suggesting

that the respondents were highly educated and likely to have a higher level of awareness about health and nutrition, as well as the ability to make informed choices.

The frequency of visiting quick service restaurants showed that most respondents (166, or 80.6%) visited monthly, indicating a regular pattern of consumption. This was followed by 33 (16.0%) who visited weekly, and 7 (3.4%) who visited daily. The frequency of visits may be influenced by factors such as convenience, affordability, taste preferences, and lifestyle.

Lastly, the quick service restaurants most visited by the respondents were Kilimanjaro Fast-food (78, or 37.9%), followed by Genesis and Chicken Republic (61, or 29.6%), Domino's Pizza (4, or 1.9%), and KFC (2, or 1.0%) being the least visited. This suggests that Kilimanjaro Fast-food was the most popular quick service restaurant among the respondents, followed closely by Genesis and Chicken Republic. The popularity of these restaurants may be attributed to factors such as taste, convenience, marketing strategies, and nutritional value.

Table 1: Frequency distribution of Socio-demographics variable

Variables	Frequency(%)
Age group	
20 and below	5(2.4)
21 - 30 years	73(35.4)
31 - 40 years	79(38.3)
41 - 50 years	23(11.2)
51 - 60 years	22(10.7)
61 and above	4(1.9)
Gender	
Male	116(56.3)
Female	90(43.7)
Marital Status	
Married	70(34.0)
Widowed	2(1.0)
Divorced/Separated	4(1.9)
Single	130(63.1)
Educational Level	
Non Formal	0(0)
Primary	0(0)
Secondary	2(1.0)

Tertiary 204(99.0)

Frequency of visiting fast food

Daily 7(3.4)

Weekly 33(16.0)

Monthly 166(80.6)

Quick Service Restaurants mostly visited Percentage

Genesis 61(29.6)

Chicken Republic 61(29.6)

KFC 2(1)

Domino's Pizza 4(1.9)

Kilimanjaro 78(37.9)

The tables below presents the frequency distribution of the impact of employee responsiveness on consumer satisfaction in quick service restaurants within the context of non-communicable diet-related diseases based on the responses of study participants.

Table 2a: Showing frequency distribution of Impact of Employee Responsiveness on Consumer Satisfaction within the context of Non-Communicable Diet-Related Diseases in Quick Service Restaurants.

Variables	Frequency(%)
Customer long-term relationship with the restaurant is based on food quality	
Strongly disagree	40(19.4)
Disagree	66(32.0)
Neutral	20(9.7)
Agree	52(25.2)
Strongly Agree	28(13.6)
Increased availability of healthier food/beverage options ensures customer loyalty	
Strongly disagree	6(2.9)
Disagree	23(11.2)
Neutral	29(14.1)

Agree	94(45.6)
Strongly Agree	54(26.2)
Employees are prompt in solving diet-related concerns of customers	
Strongly disagree	9(4.4)
Disagree	20(9.7)
Neutral	44(21.4)
Agree	102(49.5)
Strongly Agree	31(15.0)
Customers are satisfied with the restaurant's promotion of high-quality diet	
Strongly disagree	19(9.2)
Disagree	32(15.5)
Neutral	46(22.3)
Agree	82(39.8)
Strongly Agree	27(13.1)
Total	206(100)

Table 2b: Showing frequency distribution of Customers' Recommendations for Measures to improve the Responsiveness of Quick Service Restaurants in Addressing Non-Communicable Diet-Related Diseases

Variables	Frequency(%)
Improve health literacy and nutrition education	
Strongly disagree	2(1.0)
Disagree	3(1.5)
Neutral	15(7.3)
Agree	56(27.2)
Strongly Agree	130(63.1)
Provide free fruits and vegetables	
Strongly disagree	5(2.4)
Disagree	29(14.1)

Neutral	38(18.4)
Agree	65(31.6)
Strongly Agree	69(33.5)
Prepare natural-based foods containing more fruits, vegetables, whole grains, nuts, and seafood	
Strongly disagree	5(2.4)
Disagree	5(2.4)
Neutral	2(1.0)
Agree	91(44.2)
Strongly Agree	103(50.0)
Implement subsidy strategies to lower prices of more healthful foods and restrict the promotion of unhealthy foods	
Strongly disagree	7(3.4)
Disagree	4(1.9)
Neutral	13(6.3)
Agree	50(24.3)
Strongly Agree	132(64.1)
Total 206(100)	

Table 3a compares the mean responses of males and females on the impact of employee responsiveness on consumer satisfaction in quick service restaurants, focusing on non-communicable diet-related diseases.

Customer long-term relationship based on food quality: Males had a mean of 2.86 ± 1.36 , while females scored slightly lower at 2.76 ± 1.38 .

Increased availability of healthier food ensures customer loyalty: Males had a higher mean (3.97 ± 1.00) compared to females (3.60 ± 1.06).

Employees' promptness in solving diet-related concerns: Females rated this higher (3.89 ± 0.95) than males (3.40 ± 0.99).

Satisfaction with the restaurant's promotion of high-quality diet: Females had a mean of 3.40 ± 1.02 , while males had 3.26 ± 1.27 .

The total aggregate mean was 13.49 ± 1.94 for males and 13.64 ± 2.52 for females. The t-test result of -1.17 with a p-value of 0.24 shows no significant difference between male and female responses.

Table 3a: Mean Comparison (Independent t test) between Male and Female on Impact of Employee Responsiveness on Consumer Satisfaction within the context of Non-Communicable Diet-Related Diseases in Quick Service Restaurants.

S/no	Description	Mean±SD	Mean±SD	Mean±SD
Impact of Employee Responsiveness on Consumer Satisfaction		Male	Female	Aggregate
		N=116	N=90	N=206
1	Customer long-term relationship with the restaurant is based on food quality	2.86±1.36	2.76±1.38	2.81±1.37
2	Increased availability of healthier food/beverage options ensures customer's loyalty	3.97±1.00	3.60±1.06	3.79±1.03
3	Employees are prompt in solving diet-related concerns of customers	3.40±0.99	3.89±0.95	3.65±0.97
4	Customers are satisfied with the restaurant's promotion of high-quality diet	3.26±1.27	3.40±1.02	3.33±1.23
Total		13.49±1.94	13.64±2.52	13.58±4.60
Aggregate Mea± SD		3.42±0.62	3.53±0.74	3.39±1.15
t-test		-1.17		
Df		204		
p-value		0.24		

Table 3b below presents the results of an Independent t-test comparing male and female customers' recommendations for improving Quick Service Restaurants' responsiveness to Non-Communicable Diet-Related Diseases. Females consistently gave higher ratings across all items compared to males. The total aggregate mean for males was 16.76±2.61 and for females 17.54±2.23, indicating that females were generally more supportive of these recommendations.

The t-test value is -2.250 with 204 degrees of freedom (df) and a p-value of 0.03, indicating a statistically significant difference between males and females at the 5% significance level (p < 0.05). This suggests a meaningful difference, with females generally being more supportive of the recommendations than males.

Table 3b: Mean Comparison (Independent t test) between Male and Female on Customers' Recommendations for Measures to improve the Responsiveness of Quick Service Restaurants in Addressing Non-Communicable Diet-Related Diseases

S/no	Description	Mean±SD	Mean±SD	Mean±SD
Customers' Recommendations for Measures to improve the Responsiveness of Quick Service Restaurants in Addressing Non-Communicable Diet-Related Diseases		Male	Female	Aggregate
		N=116	N=90	N=206



5	Improve health literacy and nutrition education	4.34±0.91	4.70±0.51	4.52±0.71
6	Provide free fruits and vegetables	3.85±1.07	3.72±1.19	3.79±1.13
7	Prepare natural-based foods containing more fruits, vegetables, whole grains, nuts, and seafood	4.24±0.89	4.53±0.72	4.39±0.81
8	Implement subsidy strategies to lower prices of more healthful foods and restrict the promotion of unhealthy food	4.32±1.11	4.59±0.69	4.46±0.9
	Total	16.76±2.61	17.54±2.23	17.16±3.55
	Aggregate Mea± SD	4.19±0.65	4.39±0.58	04.29±.89
	t-test	- 2.250		
	Df	204		
	p-value	0.03		

Table 4a the mean ratings across different age groups on how employee responsiveness affects customer satisfaction. The highest mean score is from 51-60 age group (3.77±0.43), while <21 age group has a slightly lower mean of 3.40±0.55. ANOVA result (F = 1.658, p = 0.15) shows that the differences in means between age groups are not statistically significant (p > 0.05), This suggest that the observed differences in ratings could be due to random chance, and there is no strong evidence that age affects how people perceive the importance of employee responsiveness for customer satisfaction

Table 4a: Mean Comparison (ANOVA) between the various Age groups on Impact of Employee Responsiveness on Consumer Satisfaction within the context of Non-Communicable Diet-Related Diseases in Quick Service Restaurants.

Age group	N	Mean ± SD	Std. Error	95% Confidence Interval for mean		Df	F	Sig
				Lower Bound	Upper Bound			
< 21	5	3.40±0.55	0.25	2.72	4.08			
21 - 30	73	3.44±0.76	0.09	3.26	3.62			
31 - 40	79	3.39±0.69	0.08	3.24	3.55			
41 - 50	23	3.48±0.51	0.11	3.26	3.70	5	1.658	0.15
51 - 60	22	3.77±0.43	0.09	3.58	3.96			
>60	4	4.00±0.00	0.00	4.00	4.00			
Total	206	3.47±0.68	0.05	3.38	3.56			

Table 4b compares how different age groups rated their recommendations for improving responsiveness to diet-related diseases. <21 and 21-30 age groups have the highest mean

ratings (4.45 ± 0.27 and 4.45 ± 0.54), while the >60 group gave the lowest rating (3.75 ± 0.57). The ANOVA result ($F = 2.824$, $p = 0.02$) indicates that the differences between age groups are statistically significant ($p < 0.05$), meaning age plays a role in how customers perceive the importance of these recommendations.

Table 4b: Mean Comparison (ANOVA) between the various Age groups on Customers' Recommendations for Measures to improve the Responsiveness of Quick Service Restaurants in Addressing Non-Communicable Diet-Related Diseases

Age group	N	Mean \pm SD	Std. Error	95% Confidence Interval for mean		Df	F	Sig
				Lower Bound	Upper Bound			
< 21	5	4.45 ± 0.27	0.12	4.11	4.79			
21 - 30	73	4.45 ± 0.54	0.06	4.32	4.58			
31 - 40	79	4.19 ± 0.61	0.06	4.05	4.33			
41 - 50	23	4.26 ± 0.74	0.15	3.93	4.58	5	2.824	0.02
51 - 60	22	4.04 ± 0.72	0.15	3.72	4.36			
>60	4	3.75 ± 0.57	0.28	2.83	4.66			
Total	206	4.27 ± 0.62	0.04	4.18	4.36			

Discussion

The primary objective of this study was to evaluate consumer perspectives on Quick Service Restaurants' (QSRs) practices and challenges in addressing Non-Communicable Diet-related Diseases in Port Harcourt. Specifically, the research aimed to analyze the impact of employee responsiveness on consumer satisfaction and to assess customer recommendations for improving QSR responsiveness in this context.

The findings reveal significant differences in how male and female consumers perceive the impact of employee responsiveness on satisfaction, particularly regarding non-communicable diet-related diseases. In the highly competitive fast-food industry, maintaining and enhancing marketing effectiveness is essential. QSRs utilize various strategies to deliver convenient services that cater to their target market, ultimately aiming to boost marketing performance. As the demand for elevated dining experiences grows especially in urban areas like Port Harcourt, where diverse culinary preferences emerge QSRs must align their offerings with customer expectations for convenience. This alignment is likely to enhance customer satisfaction, loyalty, and retention, driving overall business success.

Convenience has been identified as a critical predictor of customer satisfaction. Research by Seiders and colleagues in 2005 and 2007 underscore the significant role convenience plays in the relationship between customer satisfaction and repurchase behavior. Service convenience can serve as a powerful tool for achieving competitive advantages and enhancing an organization's market position. Generally, increased customer satisfaction leads to heightened loyalty, reduced price sensitivity, better market share protection, and lower costs associated with customer acquisition and service failures (46,45)

Moreover, customer satisfaction directly influences loyalty, retention, repeat purchases, and referrals. It is characterized as a positive emotional response stemming from the

gratification derived from experiencing a product, service, benefit, or reward (39). However, the sector has also faced instances of customer dissatisfaction with service quality, which can lead to customer attrition and, in extreme cases, the closure of QSR outlets. This illustrates the direct correlation between service quality and customer retention in Port Harcourt's QSR landscape.

Results from the Independent t-test indicated that female customers consistently provided higher ratings for recommendations to improve QSR responsiveness to non-communicable diet-related diseases, with an aggregate mean of 17.54 for females compared to 16.76 for males. This suggests that women are more supportive of health-enhancing changes, reflecting broader societal trends where women often confront unique challenges, such as food insecurity, motivating them to advocate for healthier food options. Additionally, the trend toward convenience foods complicates women's roles in household nutrition, as they navigate busy lifestyles while striving to provide healthy meals. This context emphasizes the necessity of adopting a gendered perspective in food policy and QSR operations. By addressing the specific needs of female consumers, stakeholders can devise more effective strategies to promote healthier eating and mitigate the prevalence of diet-related diseases.

Supporting this discussion, research indicates that restaurants participating in initiatives like the National Restaurant Association's Healthy Dining Kids LiveWell Program have successfully reduced children's meal calorie counts. However, by 2013, less than 11% of children's meals met recommended nutritional criteria (34). Many chains have employed marketing practices that do not align with voluntary health pledges, particularly targeting children under 12, while adolescents aged 12 to 17 remain vulnerable to marketing unhealthy products.

Interestingly, there is a growing acceptance among consumers for healthy default choices, such as substituting fries with fruits or offering water instead of sweetened beverages (34). Between 2008 and 2016, notable changes were made in the availability of sugary drinks at children's menus across various chains, shifting from 93% to 74%, with a modest increase in healthier beverage options. Yet, similar initiatives for adolescents or adults remain lacking. A 2016 evaluation of leading QSRs revealed that while some chains began to implement healthy side dishes for children, such as fruits and vegetables, many did so inconsistently (19).

Furthermore, pricing strategies present a powerful tool for addressing health disparities, but no major QSR or fast-casual chain has effectively used pricing to promote healthier purchases.

These findings highlight the need for QSRs to improve service quality and adopt health-conscious practices, particularly in terms of employee responsiveness and menu options. By prioritizing these changes and recognizing the diverse needs of their consumer base, QSRs can enhance customer satisfaction and contribute to better health outcomes within the community.

Conclusion

This study highlights the critical importance of customer satisfaction as a function of all interactions and experiences with Quick Service Restaurants (QSRs). He, Li, and Harris (20) emphasize that when a brand's performance aligns with consumer expectations, satisfaction is readily achieved. Tse and Wilton define customer satisfaction as the consumer's response to the perceived discrepancy between prior expectations and actual performance post-consumption. The findings indicate that average customers are likely to feel satisfied when QSRs deliver exceptional service and continually improve their offerings (53).

Moreover, the results underscore the role of service innovation as a significant determinant of customer satisfaction and subsequent behavioral intentions, such as repeat patronage and positive word-of-mouth referrals. There is a social responsibility for the food industry to provide nutritious and safe food options, particularly as many leading food companies focus on ultra-processed foods, which have been linked to adverse health outcomes (36).

The study also found that significant improvements in food environments often require mandated changes, as voluntary efforts tend to have limited effectiveness (18). QSRs have the opportunity to regulate portion sizes and introduce various serving options at different price points, thus appealing to health-conscious consumers while maintaining profitability. Despite some progress, there remains a need for stronger regulations around unhealthy food marketing and the targeting of specific demographics based on gender (51).

Furthermore, the potential for gender-targeted interventions within food environments is notable. "Nudging" techniques, such as front-of-pack nutrition labeling and strategic placement of healthier options in supermarkets, could significantly influence consumer choices. Given that women are often the primary shoppers, addressing their specific needs can lead to more effective health-promoting strategies.

In conclusion, the findings reveal that food quality is a major determinant of QSR patronage and significantly influences customer satisfaction and overall dining experiences. The researchers recommend that food service firms in Port Harcourt consistently improve their food quality to enhance patronage and ensure sustainability. QSR managers must prioritize key food quality attributes that drive customer satisfaction and encourage repeat visits, ultimately contributing to the health and well-being of the community.

Recommendations

Based on the findings of this study, several actionable recommendations are proposed to enhance customer satisfaction in Quick Service Restaurants (QSRs) in Rivers State, Nigeria. These insights hold practical implications for operations managers seeking to improve service delivery and customer experiences.

- I. **Customer-Centric Service Design:** QSRs should implement customer-centric service systems that minimize the effort required for customers to access service points. A seamless customer experience is essential, as negative encounters can deter customers and harm the restaurant's reputation. Research by Hill and Alexander (27) highlights that while it takes numerous positive experiences to build customer loyalty, just two negative interactions can lead to significant customer attrition.
- II. **Enhancing Service Quality:** Operations managers should prioritize ongoing improvements in service quality. This can be achieved through regular staff training and workshops aimed at enhancing service skills. Additionally, establishing effective reward systems can motivate employees to deliver high-quality service, reducing the costs associated with acquiring new customers. Satisfied customers are more likely to return and recommend the restaurant to others.
- III. **Clear Labelling Regulations:** The establishment of clear labelling regulations is crucial for providing consumers with objective information regarding nutrition and health claims. Such regulations can empower customers to make informed choices, particularly those with less healthy diets.
- IV. **Marketing Guidelines for Children:** Developing objective criteria for marketing food products to children will help ensure that advertising promotes healthy eating habits. It is essential to protect younger consumers from the marketing of unhealthy food options.
- V. **Food Reformulation:** Identifying foods that require reformulation to meet health standards is critical. Setting thresholds for what constitutes a healthy product can guide manufacturers in improving their offerings.
- VI. **Fiscal Policies for Healthy Diets:** Policymakers should consider implementing fiscal strategies to promote healthier diets, including the taxation of unhealthy food items or subsidies for healthier alternatives. These measures can influence consumer behavior and support public health initiatives.

- VII. **Alignment with Nutrition and NCD Action Plans:** Local nutrition and non-communicable disease (NCD) action plans should be aligned with global or regional targets. This alignment will help ensure the availability of resources and trained personnel for the development, implementation, and monitoring of effective policies.
- VIII. **Nutritional Standards in Institutions:** Establishing standards for public procurement and food provision in institutions is vital. Regular assessments of the nutrient composition of foods served, particularly in schools and other settings, should be conducted to ensure compliance with recommended nutritional levels.

By adopting these recommendations, QSRs can significantly enhance customer satisfaction and loyalty, contributing to improved public health outcomes and fostering sustainability in their operations within Rivers State.

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