# Food Freshness and Temperature and Customer Patronage of Restaurant Customers in Port Harcourt.

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#### Abstract

The aim of this study was to ascertain the extent of the relationship between food freshness/temperature and Customer Patronage of Restaurants in Port Harcourt. This study adopted causal research, involving cross sectional survey design and used structured copies of questionnaire. The instrument contained 25 item questions weighted with 5-point Likert measurement scale to collect data from Three Hundred and Eighty-Four (384) customers of restaurants in Port Harcourt which constituted the sample size as drawn from the infinite population. The internal consistency of the measuring item was subjected to test of reliability using Cronbach alpha tool at 0.70 as a benchmark for acceptance (Nunnally 1978). Regression analyses was adopted as analytical tools for data analyses. The study unveiled a very strong relationship between food freshness/temperature and customer retention and customer commitment. This study therefore concluded that increased customer patronage in the restaurant sector can be achieved if food freshness/temperature is improved by restaurant owners.

**Keywords:** Food Quality, Food Freshness, Food Temperature, Customer Patronage, Restaurant

#### 1. Introduction

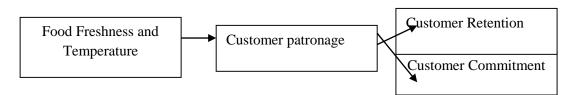
Customers have more options in their restaurant selections than before, and customers today are not static as they test a variety of goods and services in order to achieve different decisions (Williams, 2000), as a result of this development, restaurants are competing aggressively to retain a larger share of the market through provision of quality and improved service offering. According to Raab and Zemke, (2016), the restaurant industry as a whole is highly competitive and faces a number of barriers which only proactive firms can achieve profitability.

Achieving a glaring success in a service industry requires meeting and exceeding customer actual expectation and creating customer delight in every transaction. Restaurant managers now need to understand the uniqueness of their customers and what contributes to their value to retain and attract new customers and at the same time remain competitive and profitable (Walter & Edvardsson, 2010). The unstable nature of the business environment has made

organizations focus on customer satisfaction and patronage, as a means of achieving corporate objectives (Aghazadeh, Estiri & Osanlou, 2007). Since a service process leads to an outcome resulting in the customer being either satisfied or dissatisfied with the service experience (Mayer, Bowen & Moulton, 2003), it is of paramount importance that service organizations pay attention to designing the system by which service concepts are produced and delivered to customers (Brown, Fisk & Bitner, 1994). It is important to note that the food service industry is influenced by fast-changing customer preferences (Kara, Kaynak, & Kucukemiroglu, 1995; Waldfogel, 2008) and choices are among valued options with acceptance indicating a willingness to tolerate the status quo (Fife, Schaw, Kelay, Vloerbergh, Chenoweth, Morrison, & Lundéhn, 2007). As a result of this development, consumers are going back to the basis, laying emphasis on food freshness, natural and minimally processed foods as attributes before consumption. This change in consumption pattern, attention in reduction in consumption of genetically modified organism (GMOs) and general alteration in consumer behavior is affecting service delivery in restaurants in Port Harcourt, Rivers State, Nigeria. As a result of this changing market environment in today's restaurant business, operators must prioritize understanding the market trends in order to retain existing customer and at the same time, attract new customers, meeting these choices indicate performance which will be evident in the level of patronage experienced.

## 2.1 Theoretical and Conceptual Framework of the Study

- **2.2 Attribution theory** associated with Weiner, Frieze, Kukla, and Reed (1971) explains that majority of customers in the restaurant sector see service as a bundle of attributes and characteristics which customers assign different levels of importance to depending on the need. Customers' judgment before a restaurant is visited is dependent on the value of the offering (attributes and importance). Attribution theory also helps customers to evaluate a purchase experience whether it is satisfactory or not using the key quality attributes.
- **2.3** Comparison level theory by Thibaut and Kelley (1959) explains that majority of customers' makes comparison for a product or services to know the before and after purchase experiences. These decisions are based on direct past interactions which have produced experiences with similar products or services and the experiences of other customers who have patronized similar offerings. Therefore, to create a good customer experience that may eventually lead to repeat patronage, restaurant owners must ensure that every customer's expectation is met and if possible, surpassed.



**Figure 2:** Conceptual Framework of the Relationship between Food Freshness/Temperature and Customer Patronage.

Source: Desk Research, 2019

# 2.2 The Concept of Food Freshness/Temperature and Customer Patronage

Food freshness is an aspect of food quality that has attracted series of scholarly interest in the service industry. Freshness refers to the state of food associated with its crispness, juiciness, and aroma (Peneau, Hoehn, Roth, Escher, & Nuessli, 2006). Food temperature is the degree of hotness and juiciness of a food during delivery to the customer. In terms of food attribute;

freshness is the essential sensory element that interacted with the factors such as taste, smell and sight (Delwiche, 2004). Generally, freshness also refers to the fresh and physical state of food that appear to be related to the food properties such as crispness, juiciness, and aroma (Péneau et al., 2006).

Satisfying a customer requires important attributes like food freshness which firms have included on their service delivery (Whitehall, Kerkhoven, Freeling, & Villarino, 2006). Maintaining a high level of food quality is absolutely necessary to satisfy the needs and expectations of the restaurant customers (Peri, 2006). A study by Whitehall et al., (2006) revealed that improvement in the quality of food offered to the restaurant customers can break a firm out of the industry competitive rivalry which can be accessed through increased customer patronage. A limited number of authors investigated the factors contributing to the concept of freshness from a consumer perspective. According to Cardello and Schutz (2003) professionals in the food industry and consumers agree that "freshness" is a critical variable that affects the overall quality and acceptability of a food which leads to customer satisfaction. In a study by Ragaert et al. (2004) 200 consumers rated food freshness as a major determinant factor influencing the purchase and consumption of foods in restaurants. Similarly, Babicz-Zielinska (1999) in a study of 351 university student, accounted that food freshness among other 13 factors considered influenced customer satisfaction positively more than others.

In this connection, Ng (2005) stated that overall food quality attributes (taste, freshness, and appearance) play a higher vital role in attaining or exceeding customer satisfaction and intent to come back than other factors such as price, value, convenience and cleanliness. Lappalainen et al., (1998); Lennernäs et al., (1997) carried out an empirical study on the important factors that influences consumer food choice, the primary factors they identified were quality and freshness. Cardello & Schutz (2003) argued that scientists, food industry professionals, and the public also agree that "freshness" is a critical variable that affects overall customer satisfaction and hence patronage. Although there are several studies that have been done on the service quality and the customer satisfaction in fast the food restaurants such as Brady, Robertson and Cronin, (2001); Gilbert, Veloutsou, Goode and Moutinho, (2004); Huam et al., (2011); Qin and Prybutok, (2008), however the five dimensions of SERVQUAL may not necessary be included at the same time simply because some of them seem less appropriate for the restaurant context (Andaleeb & Conway, 2006). Most of the studies found a link between food freshness and customer satisfaction which is one of the determinants of customer patronage.

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According to Trenkle (1982) a fresh is a food that has undergone no treatment to make its shelf life longer, neither during nor after production or fabrication. In a restaurant setting however, food freshness can be seen as a meal that has not stayed beyond a certain time frame from the time of production. On the other hand, temperature is considered as a sensory element of food quality (Jaksa, Robert & John, 1999; Johns & Tyas, 1996). It is the degree of acceptable warmth a meal should have before it can be served.

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Satisfying a customer requires important attributes like food freshness which firms have includes in their service delivery (Whitehall et al., 2006). Maintaining a high level of food quality is absolutely necessary to satisfy the needs and expectations of the restaurant customers (Peri, 2006). A study by Whitehall et al., (2006) revealed that improvement in the quality of food offered to the restaurant customers can break a firm out of the industry competitive rivalry which can be accessed through increased customer patronage.

## Food Freshness/Temperature and Customer Retention

A limited number of authors investigated the factors contributing to the concept of freshness from a consumer perspective. According to Cardello & Schutz (2003) professionals in the food industry and consumers agree that "freshness" is a critical variable that affects the overall quality and acceptability of a food which leads to customer retention.

In a study by Ragaert et al. (2004) 200 consumers rated food freshness as a major determinant factor influencing the purchase and consumption of foods in restaurants. Similarly, Babicz-Zielinska (1999) in a study of 351 university student accounted that food freshness among other 13 factors considered influenced customer satisfaction positively more than others and has the tendency to cause retention in the near future.

In this connection, Ng (2005) stated that overall food quality attributes (taste, freshness, and appearance) play a higher vital role in attaining or exceeding customer satisfaction and intent to come back than other factors such as price, value, convenience and cleanliness. Lappalainen et al., (1998); Lennernäs et al., (1997) carried out an empirical study on the important factors that influences consumer food choice, the primary factors they identified were quality and freshness. Cardello & Schutz (2003) argued that scientists, food industry professionals, and the public also agree that "freshness" is a critical variable that affects overall customer satisfaction and future retention

#### Food Freshness/Temperature and Customer Commitment

There are several dimensions of food quality with varied definitions also. The term 'quality' has varied and is inconsistent (Shaharudin, Hassan, Mansor, Elias, Harun, & Aziz, 2010) depending on the customer understanding and the very attribute under consideration. In order to make a good purchase decision, consumers focus more on those key attributes that appeal to their senses. According to Kotler and Armstrong, (2010) these key attributes and expectation form their own value regarding the various market offerings.

According to Rijswijk and Frewer, (2008), taste, good product, natural/organic and freshness are key considerations that guide a consumer to make a purchase in a restaurant. Also, Peneau, Hoehn, Roth, Escher and Nuessli, (2006) outlined freshness as one of the several description of food quality that makes a consumer to be committed a particular restaurant. Whitehall, et al., (2006) identified fresh food as a vital attribute of a quality food which increases the chances of a customer to be committed.

#### Methodology

This study adopts the descriptive research design, this design was chosen, because the researcher believes that this quantitative result would aid in the establishment of the nexus

between the variables i.e. food freshness and customer patronage. Among fast food restaurants in Rivers State.

The linear regression was adopted to test the hypothesis that were developed, similarly the technique allows us to establish the median relationship that exist between the independent and dependent variable respectively.

#### **Data Presentation**

Table 4.1: Linear Regression Analysis for the Relationship between Food Freshness/Temperature and Customer Retention

Variable	В	SEB	β	t	sig	
FFT	.585	.051	.426	11.393	.001	
CR	.305	.005	305	19.7107	000	

**H0**<sub>1</sub> There is no significant relationship between food freshness/temperature and customer retention.

The regression result in table 4.1 above shows that food freshness/temperature (FFT) has a significant impact or influence on the customer retention (CRT) of restaurants in River State. The beta  $(\beta)$  weight of 305 is an indication that about 30.5 percent of the effect of customer retention is caused by food freshness/temperature. Also, food freshness/temperature presentation (FFT) has a positive and significant influence on customer retention. It shows that a 1% increase in FFT would lead to approximately 30.5% increase in customer retention. This impact is seen to be statistically significant at the 5% level of significance, judging from the F-value of 37 which is >19.7107. Therefore, Hypothesis ten  $(H_{A1})$  of this study is rejected and it's alternate  $(H_{A1})$  is accepted at the 5% level of significance. This means that there is a significant relationship between menu variety (FFT) and customer retention (CRT) of restaurant in Rivers State

**Table 4.2:** Linear Regression Analysis for the Relationship between Food Freshness/Temperature and Customer Referral

Variable	В	SEB	β	t	sig	
FFT	.585	.051	.426	11.393	.001	
CR	.305	.005	305	19.7107	000	

**H02** there no significant relationship between food freshness/temperature and customer referral.

The regression result in table 4.2 above shows that food presentation (FFT) has a significant impact or influence on the customer referral (CR) of restaurants in River State. The beta ( $\beta$ ) weight of 305 is an indication that about 30.5 percent of the effect of customer referral is caused by food freshness/temperature. Also, food freshness/temperature (FFT) has a positive and significant influence on customer referral. It shows that a 1% increase in FP would lead to approximately 30.5% increase in customer referral. This impact is seen to be statistically significant at the 5% level of significance, judging from the F- value of 37 which is >19.7107. Therefore, Hypothesis twelfth (H<sub>A12</sub>) of this study is rejected and it's alternate (H<sub>A2</sub>) is accepted

at the 5% level of significance. This means that there is a significant relationship between food freshness/temperature (FFT) and customer referral (CR) of restaurant in Rivers State

# **Findings and Discussion**

This section we present the findings and also, discuss all the result from the analysis to see their estimated relationship between the dimension of food freshness/temperature and the measures of customer patronage customer were explained and their implications discussed.

#### Food freshness/temperature and Customer Retention

From table 1 the associated *p*- value for the corresponding test to food freshness and temperature and customer retention is less than 0.05, hence we reject the tenth null hypothesis, implying that there exist a significantly and positive relationship between food freshness and temperature and customer retention. This position is consistent with the thoughts of Whitehall, Kerkhoven, Freeling, & Villarino, (2006) they argued that satisfying a customer requires important attributes like food freshness which firms have included in their service delivery. Earlier scholars had also taken a position that is similar to that of the above mentioned scholars, (e.g Babicz-Zielinska (1999) who conducted a study of 351 university student, accounted that food freshness among other 13 factors considered influenced customer satisfaction positively more than others. Following in the same line of argument, Ng (2005) stated that overall food quality attributes (taste, freshness, and appearance) play a higher vital role in attaining or exceeding customer satisfaction and intent to come back than other factors such as price, value, convenience and cleanliness. This study agrees with the assertions of the above mentioned scholars.

The study finds support from the argument of to Cardello & Schutz (2003) who stated that both professionals in the food industry and consumers agree that "freshness" is a critical variable that affects the overall quality and acceptability of a food which leads to customer retention. On the strength of these empirical evidence we thus conclude that food freshness and temperature does significantly affects customer retention. This can be seen from the means score of 4.20 We therefore argue that restaurants would do well to that they are able to constantly offer fresh food and ensure that the temperature of their offering is right as this would enhance the achievement of customer retention.

#### Food Freshness/ Temperature and Customer referral.

From table 2 the associated p- value for the corresponding test to food freshness and temperature and customer commitment is less than 0.05, hence we reject the twelfth null hypothesis, implying that there exist a significantly and positive relationship between food freshness and temperature and customer referral. This position is consistent with the thought of Sulek & Hensley, (2004) they argued that customer satisfaction has remained a critical business objective that builds repeat purchase and when customer repeat, they hardly come alone. Customers always share their favorable restaurant experiences with friends and often times, make positive recommendations. Because food is a fundamental component of the restaurant experience, it has to remain fresh to make a major impact on consumer satisfaction, return patronage and referral. This study agrees with the position of Peri, (2006) who argued that maintaining a high level of food quality is absolutely necessary to satisfy the needs and expectations of the restaurant customers which may encourage a positive word of mouth. On the strength of the above mentioned facts we therefore, conclude that food freshness and temperature does have a significant impact on customer referral. This can be seen from the mean score of 4.2 indicating that restaurant ought to ensure that they improve in the quality of food offered to the restaurant customers because this can break a firm out of the industry

competitive rivalry which can be accessed through increased customer patronage and customer patronage is fueled by good word of mouth from friend and family.

#### **5. Conclusion**

The test of hypotheses carried out uncovered the existence of underlying nexus between food freshness/temperature and customer retention and customer commitment. However, this study revealed reasonable variations in the relationship and direction between perceived food quality and customer patronage. Food freshness was found to have the existence of a moderate but significant relationship with customer retention and customer commitment. Therefore, improved efforts from restaurant owners towards sustaining the freshness of food will most likely increase customer traffic and subsequent patronage.

### **5.1 Recommendations**

Restaurant owners should emphasize more on ensuring customer commitment is achieved via improved quality of service because a committed customer is a satisfied customer and can become an unpaid brand ambassador to the firm. It is important to note that customer referral has both negative and positive dimensions, and only satisfied and committed customers can make positive referrals. Therefore, foods that are served to customers must be fresh with a moderate temperate in order to give the customer an unforgettable treat for their money.

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