

The Strategic  
**JOURNAL of Business & Change**  
MANAGEMENT

ISSN 2312-9492 (Online), ISSN 2414-8970 (Print)



[www.strategicjournals.com](http://www.strategicjournals.com) Volume 10, Issue 4, Article 015

**PRODUCT PERCEPTION DIMENSIONS AND CONSUMER CONSUMPTION PATTERN OF SELECTED FAST-FOOD RESTAURANTS IN LAGOS STATE, NIGERIA**

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**PRODUCT PERCEPTION DIMENSIONS AND CONSUMER CONSUMPTION PATTERN OF SELECTED FAST-FOOD RESTAURANTS IN LAGOS STATE, NIGERIA**

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**Accepted: October 4, 2023**

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**DOI: <http://dx.doi.org/10.61426/sjbcm.v10i4.2746>**

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**ABSTRACT**

**Purpose:** *The fast food sector is one industry that is contributing positively to the world economy. Notwithstanding, consumers of fast food are worried about the quality, safety, and consistency in taste, as well as demand for better quality at lower prices which thus affects the sales of fast food products. The old brands have become less competitive due to changes in consumers' preferences, less patronage, and low consumption of fast food, as newer operators introduce a range of innovative products and this has put the sustainability of projected growth performance in sales at risk of uncertainty. Hence, this study examined the effect of product perception dimensions on consumer consumption patterns of fast foods.*

**Methodology:** *The study adopted a survey research design. For this study, 1,595 eat-in consumers were selected by convenient sampling technique to participate in the survey.*

**Findings:** *The findings revealed that product perception dimensions have a significant effect on consumer consumption patterns of selected fast-food restaurants.*

**Recommendations:** *Business managers should pay attention to these factors to enhance the consumption pattern of fast food by consumers, and thus enhance the growth and sustainability of the fast food industry in Nigeria.*

**Keywords:** *Consumption pattern, Fast food, Product perception.*

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**CITATION:** Seidu, A., Adefulu, A., Asikhia, O. (2023). Product perception dimensions and consumer consumption pattern of selected fast-food restaurants in Lagos State, Nigeria. *The Strategic Journal of Business & Change Management*, 10 (4), 219 – 232. <http://dx.doi.org/10.61426/sjbcm.v10i4.2746>.

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## INTRODUCTION

The consumers of fast food exhibit varied tastes and preferences, requesting quality menu items at lower prices, demanding convenience and pleasure, as well as quality services, and there is growing awareness and serious concern about health and nutrition. In Africa, the fast food market is still in the infant stages of development in many countries excluding South Africa and Egypt that have well-established markets (Research and Market, 2019). Nigeria's fast food is growing due to development and the increasingly fast lifestyles (Euromonitor International, 2018). Transparency Market Research (2018) stated that the fast food global market will expand at a Compound Annual Growth Rate (CAGR) of 4.40% through the period between 2013 and 2019. The market was valued at US\$477.1 billion in 2013 and is predicted to be worth US\$617.6 billion by 2019. Similarly, the Nigerian fast food business saw a great jump in growth in 2013, with a total of N230 billion in turnover up from the N200 billion (about 1.22 billion US Dollars) it did in 2012 (Eromosele, 2014); and projected a 15 percent growth for the fast food sector in 2014 to N265 billion (Augusto & Co, 2014).

According to some noble researchers, the consumption of fast food is growing in many countries including Nigeria, due to its ease, availability, reduced cost, reliable taste, easy access through a variety of fast food outlets, and the fast food sector's manager efforts (Brown, Carson, Johnson & Kris-Etherton, 2015; Wang, Wang, Xue & Qu, 2016). Notwithstanding, the increase in consumer awareness about eating healthy has resulted in a drop in sales of fast food products as consumers continue to gradually request spending habits with healthier meals. In light of these challenges, Romeo (2018) forecast that fast food restaurants are expected to witness a drop, from 5.1% growth in 2018 to 4.9% growth in 2019, according to the data presented at FSTEC (services technology). Also, the fast-food restaurants market global briefing 2020-30 noted that the global fast-food restaurants market is expected to decline from

\$855.28 billion in 2019 to \$738.74 billion in 2020 at a CAGR of -13.63% (Market Research, 2020).

In Nigeria, old brands including Sweet Sensation, Tantalizers, and Mr. Bigg's, which conventionally led fast food in Nigeria, have become less competitive due to changes in consumers' preferences, less patronage, and low consumption of fast food, as newer fast casual operators including Domino's Pizza and The Place presents a range of ground-breaking foods (Euromonitor International, 2018). Consumers are extremely worried about the quality of fast food, food safety, and consistency in taste. In addition, the consumer want to get value for money expended by requesting quality products at reduced prices (Giray, Akyn, Dolekoglu & Gun, 2012; Hutton, 1995; and Opoku-Mensah, Affedzie-Obres & Agbekpornu, 2016) and thus affects the sales of fast food products. This escalating demand for low prices has resulted in stiff competition (Salami & Ajobo, 2012) and rising health concerns regarding the quality of fast food items (Dingman, Schulz, & Wyrick, 2014), as well as the subsequent food safety regulations (Grunert, 2005) have limited the growth of the fast food market. This situation is of enormous concern and has put the sustainability of the projected growth performance in sales of fast food products at risk of uncertainty. Therefore, the authors seek to determine the effect of product perception dimensions (product price, food quality, food safety, and product taste) on consumer consumption patterns of selected Fast Food Restaurants in Lagos, Nigeria.

### Research Hypothesis

H0<sub>1</sub>: There is no significant effect between product perception dimensions on consumer consumption patterns of selected fast food restaurants in Lagos State, Nigeria.

## REVIEW OF LITERATURE

### Product Perception

Tatum (2020) described product perception as the way that consumers identify, reflect, and eventually respond to different types of goods and services,

mainly for specific brands of those products. According to the Business Dictionary, product perception covers a consumer's understanding or awareness of a firm or its products and services. Thus, to the fast food manager, consumers' product perceptions are much more important than their experience of objective reality. Product perception can be used to address consumer needs and preferences, update laws and regulations, and decide how a company is perceived and overall sales performance. Positive product perception leads to brand loyalty, increased patronage, and consumption, consumer retention, increase in sales figures, and strengthens the bond. However, negative product perception can lead to loss of credibility. For this study, the sub-variables of product perception are product price perception, food quality perception, food safety perception, and product taste perception.

### **Product Perception Dimensions**

#### **Product Price Perception**

In the words of Merinda and Budhi (2016), price is one of the most significant attributes evaluated by consumers. American Marketing Association described the price as a ratio that specifies the amount of money required to acquire a given quantity of goods or services. Price perception is described as the process of price interpretation and valuation of products or services by consumers, and has attracted many researchers for years (Gectri, 2014). The right pricing for an organization means setting a reasonable price by offering the right combination of quality and excellent products. It is the quantity of money that the consumer is eager to pay for a certain item, food, or service (Samah, Abd-Rashid, Abd-Rani, Abdul-Rahman & Abdullah, 2015). Consumers who have an understanding of the price of the product will know the quality of the goods they receive according to the amount of money that is sacrificed (Paramananda & Sukaatmadja, 2018).

#### **Food Quality Perception**

McWilliams (2016) described food quality as the standard, including appearance, texture, and flavor, as well as an internal component of the food that is

acceptable to consumers. It is the features observed in a food product and acceptable, as well as conforms to consumers' expectations (Rika, 2018). According to Islam, Islam, Azim, Anwar, and Uddin (2014), consumers are very conscious of the food quality and how it is served. Also, consumers are concerned about fast food quality as fast food intake is linked to adverse health outcomes (Dingman, Schulz, & Wyrick, 2014).

#### **Food Safety Perception**

Food safety captures the protection against all kinds of health hazards caused by food directly or indirectly and this requires the fundamental provision of being far from any kind of contamination, adulteration, toxin, and so on together with fraud and spoilage (Giray, Akyn, Dolekoglu & Gun, 2012). As far back as the 20<sup>th</sup> century the problems of residues on foods and their negative effects have come to be noticed. However, safety measures were taken only towards the end of the 20<sup>th</sup> century due to the increase in food-borne diseases and consciousness about the risks (Dolekoglu, Yilmaz, Gun & Uysal, 2012). Consumer concerns about food safety ordinarily will be influenced by personal perceptions of food-related risks.

#### **Product Taste Perception**

Taste is the feeling of flavor perceived in the mouth and throat in contact with food (Harshall, 2017). Wistoft (2018) stated that taste has a number of dimensions such as deliciousness, health, morality, love, faith, and trendiness. The researcher noted that taste can only be discussed when these dimensions are taken into consideration. The individual taste dimension is enthused by theoretical, philosophical, and practical input, as well as concepts from the philosophy of aesthetics, health education, and practice, and gastro-science (Kant, 1973; Mouritsen & Styrbæk, 2016; and Wistoft, 2016). The free Dictionary describes taste perception as the impression that results when the tongue and throat take information about the chemical configuration of a soluble stimulus. Taste perception can be altered by certain circumstances

like an individual's health status, age, temperature of the food, hunger, and smoking. These circumstances are critical for fast food industry specialists when evaluating fast food products.

### **Consumer Consumption Pattern**

According to Chkoniya, Madsen, and Bukhrashvili (2020), consumption pattern is the process by which persons identify, purchase, and consume products and services to fit all their desires. The consumption patterns are formed by certain variables such as family life cycle, age, number, and gender of people in the household, as well as occupation (Kotler & Keller, 2012). The choices in brand and product selections are greatly influenced by the level of income and other factors such as personality, self-concept, core values, and lifestyle. With the rising earnings and development, the request for food products occurred with shifts in consumption patterns (Delisle, 1990 as cited in Mensah, Aidoo & Teye, 2013). The shifting food consumption has influenced today's consumer's food purchasing behavior. Abdalla, Sulieman, El-Tinay, and Khattah (2009) stated that food consumption pattern depends mainly upon their socio-economic condition. However, Dindyal and Dindyal (2003) reported that the deep-rooted ethnic and cultural practices influence the choice of food we make as well, but the economic condition is a significant and contributing factor to determining the choice of food of any community.

Brunso, Fjord, and Grunert (2002) revealed that health, taste, process characteristics, and convenience are the four major motives for the choice of food. Health is a variable that has become very significant for many consumers, and consumers form preferences based on this dimension motivated by the potential of both a longer life and one of higher quality (Roininen, Tuorila, de Graaf & Vehkalahti, 2001; Vannoppen, Verbeke & Van-Huylenbroeck, 2002). Today, consumption of fast food has been associated with an increased risk of adverse health outcomes including increased body weight, diabetes, and an increased risk of death (Yang, Shuang, Yangbo, Buyun, Yuxiao, Linda, Robert,

& Wei, 2021; Pereira, Ebbeling, Slattery, Jacob & Ludwig, 2005; French, Harnack & Jeffery, 2000). The significance of the consumer and consumption pattern is so relevant in today's business and includes financial and otherwise. Furthermore, Barker (2016), says that today's consumers are more enlightened and so sensitive to poor food price, quality, and safety that they often walk away and never come back.

### **Empirical Review**

#### **Product perception dimensions and consumer consumption pattern**

The research by Kwock, Lee, and Park (2012) on Consumption Patterns and Perception Analyses of Hangwa, is a study used to analyze consumers' consumption patterns and perception of Hangwa to increase consumption in the market. The results showed that Hangwa was purchased mainly 'for the present' and the main reasons for buying it were traditional image and taste. However, the performance of attributes was assessed to be lower than importance for all qualities, including propagation through advertisement, promotion through mass media, and conversion of thought on traditional foods, a reasonable price, and a wide range of prices. The author noted that the management needs to diversify products and extend the expiration date based on technologies to promote consumption. In terms of price, Hangwa should become more available by lowering the price barrier for consumers who are sensitive to price. The study by Khan, Powell, and Wada (2012) on Fast Food Consumption and Food Prices: Evidence from Panel Data on 5th and 8th Grade Children confirmed that higher fast food prices were associated with lower frequency of children's fast food consumption. The study showed that background factors including the price of fast food, median household income, and fast food restaurant outlet densities were significantly associated with fast food consumption patterns among this age group. A ten percent increase in the price of fast food was associated with a 5.7% lower frequency of weekly fast food consumption.

However, the study by (Stávková et al. 2008) confirmed that the most important factors affecting purchases of all commodity groups are products' characteristics and the perceived quality. Grunert (2005) in the study of food quality and safety on consumer perception and demand revealed that the market marketplace clearly shows a development towards food in terms of quality and safety; consumers want to get the best quality at the lowest price. Perceived quality leads to purchase when the quality as perceived is high enough for the consumer to be willing to pay the price demanded. Ventura-Lucas (2004) in a study that sought to explore consumer product perceptions and attitudes towards food safety in Portugal, discovered that consumer does not have trust in food handled in restaurants as they consider having less information to judge correctly the safety level of a product. Nevertheless, respondents consider fast food not as healthy as it should be, and thus require more nutritional information as they do not find it on food labels. Bahadoram, Mirmiran, and Azizi (2015) in a study on Fast Food Patterns and Cardiometabolic Disorders, revealed that fast food consumption is a risk factor for lower diet quality, higher calorie and fat intake, and lower micronutrient density of diet.

### Theoretical Review

This paper leveraged on Total Food Quality (TFQ) Model proposed by Grunert, Larsen, Madsen, and Baadsgaard (1996) by further building on the lines of

thoughts by Steenkamp (1990) on the Model of the Quality Perception Process and works of other notable researchers. The TFQ Model analyzed the consumers' fast food quality perception before and after purchase, and with inference making; which is in line with the two major variables of the study: the dependent variable of consumer consumption pattern and the independent variable of product perception dimensions. The prominent critique of the theory is Marreiros and Ness (2009). According to Marreiros and Ness (2009), when compared with the Zeithaml model of service quality, the researchers noted that the TFQ model does not consider price as an extrinsic cue. In support of the theory, Brunso, Fjord, and Grunert (2002) stated that the theory integrates the explanation of intention to purchase and consumer satisfaction. According to the model, the desired quality of food helps satisfy purchase motives and values (Grunert, 1997).

### METHODOLOGY

The study employed a survey design. 1,595 population was used. The respondents were eat-in consumers of the selected fast-food restaurants. A self-developed structured and validated questionnaire was used for data collection. The response rate was 94.6%. Data were analyzed using descriptive and inferential statistics. The Multiple regression method was used to determine the effect of Product Perception dimensions on Consumer Consumption Patterns.

**Table 1: Result of the Reliability Internal Test of Consistency**

Variables	No. of Items	Cronbach's Alpha Coefficient	Composite Reliability
Price Perception	8	0.717	0.798
Quality Perception	8	0.771	0.787
Safety Perception	8	0.872	0.898
Taste Perception	8	0.735	0.814
Consumer Consumption Pattern	5	0.705	0.819
<b>Overall Reliability</b>	<b>37</b>	<b>0.760</b>	

*Source: Pilot Study, SPSS Output 2021*

Table 1 above shows the findings of the reliability tests where Cronbach's alpha was all above the 0.7 threshold as detailed and ranged from 0.705 and 0.872, which indicated average of good reliability,

and composite reliability items were all above the acceptable 0.7 threshold which means all the variable in the study displayed construct reliability.

**Table 2: Results of the Factor Analysis Tests**

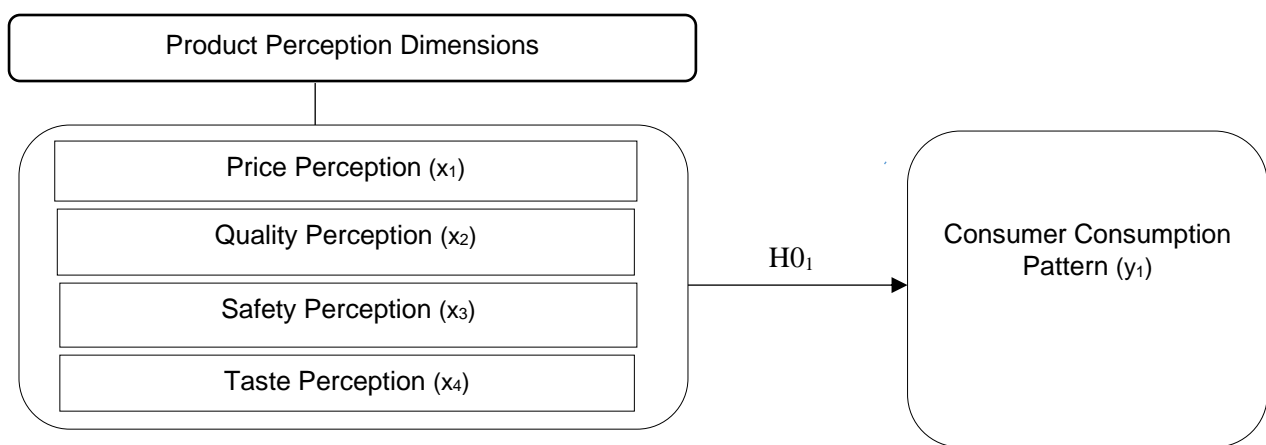
Variables	No. of Items	Kaiser-Meyer-Oklin (KMO)	Bartlett Test
Price Perception	8	0.561	506.238
Quality Perception	8	0.524	506.129
Safety Perception	8	0.625	254.887
Taste Perception	8	0.572	374.399
Consumer Consumption Pattern	5	0.626	74.342

Source: Pilot Study, SPSS Output 2021

Table 2 above presents the outcomes of the analysis on the construct validity of the research instrument. The result of the KMO for all the study variables was

found to be greater than 0.5 and not above 1, therefore the items were acceptable.

**Research Model**



Source: Author’s Research Literature Review (2021)

**Model Specification**

**Independent Variable:** Product Perception dimensions (PRODPER) = (PPP, FQP, FSP, PTP) were measured by Product Price Perception (PPP), Food Quality Perception (FQP), Food Safety Perception (FSP), Product Taste Perception (PTP).

**Dependent Variable:** Consumer Consumption Pattern (CCP)

**Functional Relationship:**

$$CCP = f(PPPPER)$$

$$CCP = f(PPP, FQP, FSP, PTP) \dots\dots\text{Functional equation (i)}$$

**Regression Model:**

$$CCP = f(PPPPER)$$

$$CCPi = \alpha + \beta PROPPER + \mu i \dots\dots\text{Regression equation (i)}$$

$$CCPi = \alpha + \beta_{1PPP} + \beta_{1FQP} + \beta_{1FSP} + \beta_{1PTP} + \mu i$$

.....Regression equation (i)

$\alpha$  = Constant

$\beta_1 - \beta_4$  = Parameters to be estimated

$\mu i$  = Error term

**Hypothesis:**

$$H_{01}: CCP = \beta_0 + \beta_{1PPP} + \beta_{2FQP} + \beta_{3FSP} + \beta_{4PTP} + \mu i$$

.....equation (i)

**RESULTS, ANALYSIS AND DISCUSSION**

The researchers administered 1,595 copies of the questionnaire out of which 1,509 were returned and found suitable for analysis. Data collected were analyzed in descriptive statistics - tables and percentages; and inferential statistics. The hypothesis was tested using multiple linear regression analysis. The results are presented in Tables 3, 4, and 5 below:

**Table 3: Descriptive on PPP, FQP, FSP and PTP**

SA – Strongly Agree, A – Agree, PA – Partially Agree, PD – Partially Disagree, D – Disagree, SD – Strongly Disagree

	SA	A	PA	PD	D	SD	Total	
	%	%	%	%	%	%	Mean	Standard Deviation
<b>Product Price Perception</b>								
The price of fast food has value for money.	35.1	28.0	22.5	5.1	7.5	1.9	4.7	1.3
Prices of fast food are competitive.	17.9	48.3	19.9	7.4	5.8	.8	4.6	1.1
Price of fast food are reasonable.	12.0	38.5	29.6	10.5	7.8	1.7	4.3	1.2
Fast food prices are economical.	15.3	33.6	23.8	11.8	11.4	4.1	4.2	1.4
Fast food prices are affordable.	12.8	31.1	30.3	12.7	10.0	3.1	4.1	1.3
Fast food price reduction encourages me to buy.	21.8	34.0	28.0	7.0	6.2	3.0	4.5	1.2
<b>AVERAGE</b>							<b>4.4</b>	<b>1.25</b>
<b>Food Quality Perception</b>								
Fast food quality is excellent.	24.9	32.3	27.0	9.0	5.8	1.1	4.6	1.2
Fast food is delicious.	20.7	33.4	32.6	8.5	3.8	1.0	4.6	1.1
Fast food is usually served hot.	17.8	34.9	32.6	10.5	3.4	.8	4.5	1.1
Fast food is often served fresh.	15.4	26.2	36.7	11.1	9.0	1.6	4.2	1.2
Fast food is healthy.	11.4	23.1	34.5	17.2	12.4	1.4	4.0	1.2
Fast food is better quality than homemade food.	3.5	15.4	32.5	20.3	13.8	14.4	3.3	1.4
Fast food is nutritious.	12.3	28.8	26.4	20.7	9.2	2.6	4.1	1.3
<b>AVERAGE</b>							<b>3.9</b>	<b>1.2</b>
<b>Food Safety Perception</b>								
Food safety is considered before buying.	44.4	29.8	15.2	5.6	4.6	.4	5.0	1.1
The fast-food restaurant has a clean environment.	18.5	46.6	24.1	7.2	3.2	.4	4.7	1.0
The restaurants often create food safety awareness.	17.5	42.3	24.3	9.1	6.0	.8	4.5	1.1
Fast food is safe for consumption.	16.0	43.5	24.1	9.5	5.6	1.4	4.5	1.1
Fast food is hygienic.	11.3	43.6	25.4	11.7	6.8	1.2	4.4	1.1
Fast food employees are well trained.	14.8	36.5	29.6	10.9	6.2	2.0	4.4	1.2
Fast food employees are neat.	14.7	43.7	25.4	8.2	5.6	2.4	4.5	1.2
<b>AVERAGE</b>							<b>4.6</b>	<b>0.95</b>
<b>Product Taste Perception</b>								
Fast food is tasty.	30.4	38.6	21.7	5.1	3.8	.4	4.9	1.1
Fast food is very spicy.	20.9	38.2	25.8	10.1	4.8	.2	4.6	1.1
I always consider the taste of fast food.	23.0	38.8	25.2	7.4	5.0	.6	4.7	1.1
Appetizing products are always available.	16.2	37.0	27.9	12.0	5.6	1.4	4.4	1.1
Fast food is tastier than homemade food.	10.3	21.2	32.6	13.9	13.4	8.6	3.8	1.4
Fast food tastes the same all the time.	15.7	23.5	31.5	13.7	12.5	3.0	4.1	1.3
<b>AVERAGE</b>							<b>4.4</b>	<b>1.2</b>

**Source: Researcher's Field Work (2021)**

Table 3 showed the descriptive analysis of product price perception (PPP), food quality perception (FQP), food safety perception (FSP), and product taste perception (PTP) of selected fast food

restaurants. The views of the respondents were obtained and the results were computed.

PPP: A grand mean of 4.4 and a standard deviation of 1.25 suggest that respondents agreed that



product price perception of fast food in the selected restaurants is high with a divergence from the mean.

FQP: Generally, a mean of 3.9 and a standard deviation of 1.2 shows that respondents have a high opinion of the quality of fast food of the selected restaurants.

FSP: On average, a mean of 4.6 and a standard deviation of 0.95 shows that respondents agreed that the fast food of the selected restaurants is safe without a variation in their opinions.

PTP: On a general note, a mean of 4.4 divulged that food taste perception is high in selected fast-food restaurants.

**Table 4: Descriptive of Consumer Consumption Pattern**

	SA	A	PA	PD	D	SD	Total	
	%	%	%	%	%	%	Mean	Standard Deviation
I prefer to eat fast food at all times.	21.1	23.1	24.9	12.1	14.3	4.5	4.1	1.5
Fast food is satisfying.	13.5	24.5	32.2	13.5	12.7	3.6	4.0	1.3
I eat fast food everywhere I visit.	10.4	23.4	27.4	18.4	13.6	6.8	3.8	1.4
I always consider health issues when buying fast food.	25.7	30.0	22.5	14.6	6.0	1.2	4.5	1.2
<b>AVERAGE</b>							<b>4.1</b>	<b>1.4</b>

**Source: Researcher's Field Work (2021)**

Table 4 above showed the descriptive analysis of consumer consumption patterns. The majority of the respondents agreed that they prefer to eat fast food at all times 21.1% strongly agreed to that, 23.1% agreed, and 24.9% partially agreed. Other respondents up 30.9% were of differing opinions 12.1% partially disagreed that they prefer to eat fast food at all times, 14.3% disagreed and 4.5% strongly disagreed. A mean of 4.1 suggests that respondents agreed that they prefer to eat fast food at all times. A standard deviation of 1.5 shows a disparity in the responses. When asked if fast food is satisfying, 13.5% strongly agreed, 24.5% agreed, 32.2% partially agreed, 13.5% partially disagreed, 12.7% disagreed and 3.6% strongly disagreed. A mean of 4.0 reveals that the respondents agreed that fast food is satisfying. When asked whether they eat fast food everywhere they visit, most of the opinions were agreed. 10.4% strongly agreed that they eat everywhere they visit, 23.4% agreed, and 27.4% partially agreed. 18.4% however disagreed, 13.6% partially disagreed and 6.8% strongly disagreed. With a mean of 3.8 and a standard deviation of 1.4, it can be opined that respondents agreed they eat

everywhere they visit. Conclusively, 25.7% strongly agreed that they consider health issues when buying fast food, 30.0% agreed, 22.5% partially agreed, 14.6% partially disagreed, 6.0% disagreed and 1.2% strongly disagreed. A mean of 4.5 is an indication of an agreed opinion of health considerations before buying fast food with a slight variation in the responses. Generally, a mean of 4.1 showed that respondents have a good consumer consumption pattern of the selected fast food restaurants in Lagos State, Nigeria.

Comparing the PPP, FQP, FSP, and PTP results in tables, it was observed that product perception dimensions have the same pattern of increase with consumer consumption pattern. When consumers have the right perception of the product's price, quality, safety, and taste, the consumption pattern of these fast food products increases. Hence, product perception dimensions have a positive relationship with consumer consumption patterns. Thus, researcher objective one has been achieved and research question one answered.

**Table 5: Summary of multiple regression analysis for effects of product perception dimensions on consumer consumption pattern**

Model Two $CCP = \beta_0 + \beta_{1PPP} + \beta_{2FQP} + \beta_{3FSP} + \beta_{4PTP} + \mu_i$		Coefficients			T	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	-0.055	0.101		-.542	0.588
	Product price perception	0.263	0.030	.235	8.725	0.000
	Food quality Perception	0.350	0.037	.298	9.580	0.000
	Food safety perception	0.011	0.031	.009	.349	0.727
	Product taste perception	0.339	0.036	.287	9.449	0.000

- a. Dependent Variable: Consumer Consumption Pattern
- b.  $R = 0.754^a$      $R^2 = 0.569$      $Adj. R^2 = 0.568$
- c.  $F(4, 1508) = 496.130$  ( $p=0.000$ )

Table 5 showed the result of the regression analysis on the effect of product perception dimensions on consumer consumption patterns of selected fast-food restaurants. From the table, the result of the analysis revealed that product price perception ( $\beta = 0.263$ ,  $t = 8.725$ ,  $p < 0.05$ ), food quality perception ( $\beta = 0.350$ ,  $t = 9.580$ ,  $p < 0.05$ ), and product taste perception ( $\beta = 0.339$ ,  $t = 9.449$ ,  $p = 0.05$ ) all have a positive and significant effect on consumer consumption pattern except for food safety perception ( $\beta = 0.11$ ,  $t = 0.349$ ,  $p > 0.05$ ), which has a positive but insignificant effect on consumer consumption pattern. The result of the finding indicated that three of the dimensions of product perception have a positive and significant effect on consumer consumption patterns. While food safety perception has an insignificant effect on consumer consumption patterns. The coefficient of multiple determination, Adjusted  $R^2$  is 0.568;  $F(4, 1504) = 496.130$ ,  $p = 0.000$ ) is an indication that product perception explained about 56.8% of the changes in consumer consumption pattern while the remaining 43.2% could be as the result of other factors not included in the model. Also, the F-statistics ( $df = 4$ ,  $1504) = 496.130$  at  $p = 0.000$  ( $p < 0.05$ ) reveals that the overall model is significant in predicting the effect of product perception dimensions on consumer consumption patterns. This means that product perception dimensions have a significant

effect on consumer consumption patterns. The multiple regression model is expressed as thus:

$$CCP = -0.055 + 0.263PPP + 0.350FQP + 0.039PTP \dots \dots \dots \text{eq. ii}$$

Where:

*CCP=Consumer Consumption Pattern, PPP = Product Price Perception; FQP = Food Quality Perception, FSP= Food Safety Perception; PTP = Product Taste Perception*

The regression model presented above revealed that when product perception dimensions are at constant zero, the consumer consumption pattern is -0.055. The result further shows that a one-unit increase in product price perception, food quality perception, and product taste perception will improve customer patronage by 0.263, 0.350, and 0.039 respectively. The result thus showed that product perception dimensions have a significant effect on consumer consumption patterns. From the above findings, the null hypothesis which states that product perception dimensions have no significant effect on consumer consumption patterns of selected fast food restaurants is thus rejected.

**Discussion of Findings**

The result of linear multiple regression analysis for the effect of product perception dimensions on consumer consumption patterns of the selected fast food restaurants in Nigeria showed the presence of

a significant effect. The result indicated that the product perception dimensions significantly influenced the consumer consumption pattern of the selected fast-food restaurants. Accordingly, scholars have reported that product perception dimensions (that is, product price, food quality, and product taste) significantly influenced consumer consumption patterns, however, food safety perception was not significant.

The finding is consistent with the findings of Paramananda, Joseph, Nelliyanli, Rap, Raghavendra, Shashidhar, Ghosh, and Singh (2015); and Khan, Powell, and Wada (2012). The study by Khan, Powell, and Wada (2012) on fast food consumption, revealed that contextual factors including the price of fast food, median household income, and fast food restaurant outlet densities were significantly associated with fast food consumption patterns. An increase in the price of fast food was associated with a lower frequency of weekly fast food consumption. However, consumption of fast food has been associated with an increased risk of adverse health outcomes including increased body weight (Pereira, Ebbeling, Slattery, Jacob & Ludwig, 2005; French, Harnack & Jeffery, 2000) and diabetes (Pereira et al. 2005).

Furthermore, a study by Min, Jahns, Xue, Kandiah, and Wang (2018) on perceptions about fast food and how they associate with its consumption and obesity risk, showed that respondents have both negative and positive perceptions of fast food, and are likely to purchase more fast food as they valued the convenience and taste of fast food, and preferred kid's menus and play areas in fast food restaurants over other eating places. Those who consumed less fast food seemed more likely to view fast food negatively. However, in the work by Kwock, Lee, and Park (2012) on consumption patterns and perception analyses of Hangwa, a study used to analyze consumers' consumption patterns and perception of Hangwa to increase consumption in the market revealed that older consumers' consumption patterns and perception need further exploration.

According to the Total Food Quality Model, quality is desired because it helps satisfy purchase motives or values. The values sought by consumers will, in turn, have an impact on which quality dimensions are sought and how different cues are perceived and evaluated.

In line with the revelations found in conceptual, empirical, and theoretical submissions in previous literature with this present study's result, product perception dimensions significantly influenced consumer consumption patterns of the selected fast food restaurants in Lagos State, Nigeria.

### **CONCLUSION AND RECOMMENDATIONS**

The study concluded that all identified product perception dimensions, which are product price, food quality, food safety, and product taste in this research positively contribute to the consumer consumption pattern. Consumer consumption pattern depends on product price, food quality, food safety, and product taste since product perception dimensions are in direct relationship with consumer consumption pattern of selected fast food restaurants. So business owners/managers should focus on and strengthen these factors to enhance the pattern of consumption of fast food by consumers.

Product perception dimensions may be an effective driver of consumer consumption patterns, and as such business owners/managers in the fast-food restaurant sector should pay special attention to the dimensions in a manner that will give room to make better decisions on their working approaches, set smart targets and regulate their operations without wrong thought from external forces thus enhance the growth and sustainability of fast food industry in Nigeria. For example, it will be helpful for fast-food businesses to know consumers' product price perceptions to realize their pricing strategies. Managers can utilize many different pricing strategies such as value pricing, penetration pricing, customary pricing, and bundle pricing. By using value pricing, a fast food restaurant will tactically increase a product's benefits while either maintaining or

decreasing the price. Value pricing assumes that customers see price as a primary indicator of a product's value.

To sustain the current growth performance being witnessed and meet the projected target, product price, food quality, food safety, and product taste perception may be more effective drivers of fast food consumer consumption patterns than other factors in this bid. For example, by communicating regularly with the consumers; distributing handbills, flyers, and posters, especially on price-saving initiatives, improving in quality of the menus, creating extensive awareness on ongoing safety measures in place, and educating consumers on available menus with excellent taste. Also, there should be a means of getting feedback on consumers' concerns through online and offline mediums. Furthermore, policymakers, business owners/managers, and various fast food and confectionary associations should continually review and update the standards, laws, and regulations

guiding the operations of the fast food industry to ensure the sustainability of growth in the sector.

#### **Suggestion for Further Studies**

The study was carried out in Ikeja and Lagos Island LGAs, Lagos, Nigeria; further study should be replicated in other LGAs in Lagos and other states, as well as other developing economies to see whether there is a difference in the consumer product perception and buying behavior of fast food.

The study focused on the fast food industry, further studies should be carried out on the effect of product perception dimensions and consumer behavior on the performance of fast food restaurants in Nigeria since the industry contributes to economic activities and growth.

Future research is expected to be conducted within the broader scope of the population, and different types of business industries, to observe and compare this study's findings with other industries, and will enable the researcher to compare results.

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