

## Influence of Gender, Level of Education and Socio-Economic Class on Patronage of Street Foods in a Nigerian Sample.

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**ABSTRACT:** This study investigated the influence of gender, socio-economic class, and level of education on patronage of street foods in Anambra state, Nigeria. This is against the background of increasing number of food vendors in the streets, the variety of foods, that gastro-intestinal diseases are quite prevalent, and that eating on the street is not historically cultural in this part of Nigeria. Street food patrons numbering 242 ( 132 males and 108 females) between the ages of 21 and 66 years ( mean 33.6, SD 8.71) selected through convenient sampling participated in the study by responding to a 10 item Likert format questionnaire. The 2 x3x3 factorial study adopted the 3-way analysis of variance statistic to test three hypotheses. Results showed that at  $P < .05$ , Gender, ( M & F ), Socio-economic Class ( low, middle, & high), and level of Education (first school, secondary and tertiary) were not significant predictors of patronage of street foods. The study concludes that people of both sexes and all classes patronize street foods, and that notwithstanding the high risk of contamination and consequent health implications, street food business has come to stay in Nigeria. It therefore recommends that this business should be properly regulated to reduce both health risks and risk of physical injury to vendors and other road users.

**KEYWORDS:** street foods, socio-economic class, level of education, gender.

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### I. INTRODUCTION

Psychologists attach great importance to the understanding of behaviours that have significant implications for physiological health of humans; probably because of the connection between physiological well-being and psychological development. One such behavior is eating behaviour, which is primarily meant to satisfy the survival motive of hunger, thus provide elements needed for sustenance of biological processes in all animals. In normal physiological conditions, digestive and homeostatic processes provide the cue to what is required, how much, and what time it would be eaten. However, in addition to physiological stimulus, humans depend on many social, economic, and psychological variables to make their food choices. Some people even use food to cope with stress, though this can actually increase negative feelings since the source of stress remains, and self image may be hurt as weight is gained (Foster, Markings, and Bailer, 2005)

Indeed, what people eat affect how they feel. The items, the quality, timing and mode of preparation, all have implications for both physiological and psychological health. Good choices predispose to control of compulsive eating, binging, and gaining weight, and this appetite control engenders feeling of calmness, high energy level, and alertness.

Street foods are foods, displayed openly to motorists and the public along busy road junctions and streets, and this is common in many commercial and busy cities in Nigeria. Most times, these foods are prepared in that vicinity, sometimes however they are prepared elsewhere and then taken to traffic congestion prone areas, motor parks, and market routes for display and sale. These 'ready to be eaten' foods are often displayed without proper covering, so they are prone to all sorts of contaminations

It has been observed that gastrointestinal diseases such as diarrhea, typhoid and paratyphoid, and dysentery are still highly prevalent in Nigeria to the extent of being the third most common cause of under five mortality. For instance, a recent data from Anambra State Ministry of Health shows the following figures for diarrhea cases:

| 2009          | 2010 | 2011 |      |
|---------------|------|------|------|
| With blood    | 257  | 481  | 433  |
| Without blood | 2851 | 4913 | 4482 |

These conditions are got through contaminated foods and water, of which dirty physical environment, improperly cleaned cooking utensils, and exposure of food to insects and dust are preludes.

It therefore interests the psychologist to ask: Why do people patronize street food? Is there gender difference in level of patronage? Do level of education or socio-economic class influence patronage?

Consumer psychologists opine that the consumatory quality of a product: the extent to which the product satisfies the motive of the buyer is one of the most powerful determinants of consumer behavior (Obi-Nwosu, 2007). Consumatory quality is the measure of the extent of satisfaction of the reason for which a product was sought after. Although food products are primarily sought after to satisfy biological drives (hunger and thirst) emanating from physiological signals, psychologists have observed that in many situations, psychological motives become so overwhelming that physiological drives are down played; at least for some time. In this context however, satisfaction encompasses two components of physiological and psychological. In this connection, one readily appreciates that palatability of food, aroma, physical presentation/attractiveness, and some cultural beliefs about food types are potent psychological variables that drive appetite beyond hunger and thirst. Indeed, many people who eat between meals, or take a lot of snacks do not do these because of hunger. However, food products providers strive to ensure that they satisfy the two components, often described in local parlance as “quantity and quality.”

In general terms, the overall consumatory quality of any product is a very significant determinant of consumer behavior. High consumatory quality engenders high purchase motivation, as well as high and enduring patronage. It is pertinent to mention that purchase motivation may be intrinsic, if it is self-driven (generated from within the consumer consequent upon deep sense of overall satisfaction), or extrinsic if it is sequel to external forces such as peer influence or company, and non availability of alternative.

The foregoing implies that products are sought after if consumers expect them to satisfy their needs; hence, the higher the expectancy, the higher the purchase motivation. This is in tandem with the position of cognitive psychologists, represented in the formula: **motivation = expectancy x value** (Pesser and Smith, 2001).

Expectancy could be heightened by advertisement, packaging and display, while value may be a constant. In this regard, a food item's value may be calculated in terms of how well it quenches hunger and thirst, how long a particular quantity of it does this, or the extent it satisfies psychological needs (including ego needs). It is plausible that open display of street fast foods, joined with visibility of other patrons who serve as models, provide the high expectation that is needed to produce high purchase and consumption motivation.

Education is the acquisition of knowledge, information and skills. It becomes relevant to consumer psychology through its function of engendering awareness, and deliberate search for specific information concerning any product of interest. It is expected that the educated consumer would want to know the chemical composition, nutritional values and possible contraindications of foods and drinks he/she intends to patronize. In the same vein, it is expected that such a person would have to assess the hygienic condition of: food items, food provider, presentation method, environment where food is prepared and served, and indeed the possibility of chemical and metallic contaminants.

To this extent, education is viewed as a strong determinant of choice of food, location of purchase, and consequently, the level of patronage of street foods. This is in tandem with Ifezue (1995), who posits that every purchase is guided by contemplation and reasoning. Of course, education provides the ‘ingredients’ for robust contemplation and reasoning.

Another variable of interest to this study is socio-economic status: the position of an individual on the socio-economic scale. Socio-economic status is determined by a combination or interaction of social and economic factors such as income, amount and kind of education, type and prestige of occupation, and place of residence (VandenBoss, 2007). Socio-economic status is closely related to social class which defines a major group or division of society that share a similar social rank and certain economic and cultural characteristics in common (Meyers, 2007). Class consciousness affects behavior through similar route as group pressure, although the pressure may be somewhat unconscious. This suggests that just as the desire to conform and retain membership of a group is at the root of acceptance or rejection of some behaviours, individuals’ desire, and value for the approval of their contemporaries (members of their class), and the applaud of the public significantly affect their actions and reactions. Marketers utilize this knowledge hence they package differently for high and low conformity groups – the so called shopping, convenience, and specialty product presentations. In the context of this paper and the research milieu in perspective, socio-economic class is demarcated into three using income level as parameter.

There seems to be significant gender differences in food preferences. For instance, in Southeast Nigeria, men prefer foo-foo (like pounded yam) with soup, while women generally go for rice and light carbohydrate foods. Men also show high preference for roast yam and plantain, and eat a lot of meat while taking alcoholic beverages, but women prefer fried plantain, and boiled yam served with sauce. In the U.S., researchers have found gender differences in food preferences. Men are significantly more likely to eat meat and poultry products, especially Duck, Veal, and Ham. They are also more likely to eat certain shellfish such as shrimp, and oysters. Women, on the other hand are more likely to eat vegetables, especially carrots and tomatoes. As for fruits, they were more likely to eat strawberries, blueberries, raspberries and apples. Women also preferred dry foods, such as almonds and walnuts, and were more likely to consume eggs and yogurts when compared with men. The researchers also reported that men were significantly more likely to eat risky foods such as undercooked hamburger and runny eggs while women were more likely to eat alfalfa sprouts (American Society for Micro-biology (2008).

Many Nigerians patronize road side/street food providers; some as snacks and others as real meals. What are their motivations? Are they ignorant of the health implications? Is it because of poverty? Or is it because such foods possess high consumatory quality? Against this background it becomes compelling to investigate why people patronize them. Specifically, this study investigates, which gender patronizes more, as well as the place of education, and social status in this consumer behavior.

## **II. HYPOTHESES**

- 1) Males will significantly differ from females in the patronage of street foods.
- 2) Low, Middle, and High socio-economic people will differ significantly in their patronage of street foods.
- 3) Holders of First School Leaving Certificate, Secondary school certificate, and Tertiary educational certificates will differ significantly in their patronage of street foods.

## **III. METHOD**

### **Participants:**

A total number of two hundred and forty participants comprising one hundred and thirty-two males and one hundred and eight females, aged between twenty one and sixty-six ( mean 33.6, and SD 7.81) selected through convenient sampling from patrons of street foods in Awka, Nnewi, and Onitsha took part in the study. They were all employed, and had a minimum educational qualification of First School Leaving Certificate.

### **Instrument:**

A 10 item Patronage of Street Food Scale developed by the authors was used for the study. The response pattern of the instrument is the Five Point Likert format. The instrument was subjected to face validity, content validity and factor analysis. The results of the factor analysis indicated that the 10 items used loaded effectively out of the initial 20 items generated. The internal consistency of the instrument was determined with Cronbach alpha of .820. Income below 40,000.00 Naira was designated low socio-economic class, 40,000.00 to 120,000.00 designated middle; while above 120,000.00 Naira was designated high socio-economic class. This classification is in tandem with current pay package in the civil service and organized private sector in Nigeria.

### **Procedure:**

The researchers drew the participants through convenient sampling, by visiting the major centers in the cities of Awka, Nnewi, and Onitsha where street food vendors normally operate, and distributing the questionnaire to every patron who volunteered to respond to the questionnaire. This process took six days (Monday through Saturday), then data was collated and analyzed. 240 copies of the questionnaire were used for the statistical analyses.

### **Design and statistics**

The study investigated the Influence of sex, Socio-economic status and Educational level on the Patronage of street food. The study has 3 predictor variables and 1 criterion variable. Hence the study adopted a 2(male & female) X 3(Low,Middle& High) X 3(FSLC,O'Level& Degree/Dip) Factorial Design. Accordingly, 3 Way Analysis of Variance was used for the statistical analysis.

**Results:**

Descriptive:

|                    | N   | Minimum | Maximum | Mean    | Std.Deviation |
|--------------------|-----|---------|---------|---------|---------------|
| Age                | 240 | 20.00   | 56.00   | 33.6625 | 10.21887      |
| Valid N (listwise) | 240 |         |         |         |               |

Univariate Analysis of Variance:

|                               | Valued Label              | N   |
|-------------------------------|---------------------------|-----|
| Sex<br>1.00                   | Male                      | 132 |
|                               | Female                    | 108 |
| 2.00                          | High                      | 59  |
|                               | Middle                    | 119 |
| Socio-economic status<br>1.00 | Low                       | 62  |
|                               | FSCL                      | 41  |
| 2.00                          | O'level                   | 97  |
|                               | OND/ Degree               | 102 |
| 3.00                          |                           |     |
|                               | Educational level<br>1.00 |     |
| 2.00                          |                           |     |
|                               |                           |     |
| 3.00                          |                           |     |
|                               |                           |     |

Test of Between Subject Effects

Dependent Variable patronage of street foods

| Source                               | Type III Sum of Squares | Df  | Mean Square | F         | Sig  |
|--------------------------------------|-------------------------|-----|-------------|-----------|------|
| Corrected Model                      | 32.393                  | 17  | 1.905       | .639      | .859 |
| Intercept                            | 149802.769              | 1   | 149802.769  | 50216.480 | .000 |
| Sex                                  | 5.092                   | 1   | 5.092       | 1.707     | .193 |
| Socio-economic                       | 1.288                   | 2   | .644        | .216      | .806 |
| Educational level                    | 6.589                   | 2   | 3.294       | 1.104     | .333 |
| Sex*socio_economic                   | 13.585                  | 2   | 6.793       | 2.277     | .105 |
| Sex*Educational_level                | 4.020                   | 2   | 2.010       | .674      | .511 |
| Socio_economic* educational level    | 5.623                   | 4   | 1.406       | .471      | .757 |
| Sex*socio_economic*educational level | .620                    | 4   | .155        | .052      | .995 |
| Error                                | 662.257                 | 222 | 2.983       |           |      |
| Total                                | 207084.000              | 240 |             |           |      |
| Corrected Total                      | 694.650                 | 239 |             |           |      |

**Hypothesis One:**

The first hypothesis which stated that there will be a significant difference between males and females on their patronage of street food was rejected at  $F=1.707$ .  $P>.05$ .

Hypothesis Two:

The second hypothesis which stated that participants who of low socio-economic, those of middle class and those high socio-economic class will differ significantly on their patronage of street food was rejected at  $F=.216$ .  $P>.05$ .

Hypothesis Three:

The third hypothesis which stated that participants who have first school leaving certificate, those who have Senior School certificate and those with Diploma & Degree will differ significantly on their patronage of street food was also rejected at  $F = 1.104$ ;  $P> .05$ .

Summary of results

The no statistically significant difference findings for the three hypotheses means that both males and females showed almost equal patronage of street foods, that both poor and seemingly well to do people patronize street foods, and that both the well educated and less educated also patronize street foods in Anambra, Nigeria.

#### **IV. DISCUSSION AND CONCLUSION**

Findings of this study shows that street foods are equally patronized by both males and females (Hypothesis 1), that people across the socio-economic classes patronize street foods (Hypothesis 2) and that both people with tertiary education, secondary and primary education did not differ in their patronage of street foods (Hypothesis 3). Analysis of the items of the questionnaire shows that while the high socio-economic class respondents patronized the street foods as snacks, others do same as foods and as meals.

Qualitative data (information from interviewed patrons who declined to respond to the questionnaire) shows that most of the well to do individuals used the street foods between meals, especially while driving on long journeys when the usual meal times may be missed. While the other classes of patrons saw the street foods as good and appropriate meals because they were good, served as the right time, and were often cheaper than such meals prepared at home.

It is deductible from the foregoing, that notwithstanding the statistically non significant differences, economic considerations are among the first line motivations for patronage of street foods in this part of the world. Another is culture. This is suggested by the fact that the mostly patronized street foods are traditionally roasted corn and pear, roasted yam and plantain, cooked walnut flour and the like. Qualitative data support the proposition that the street foods are perceived as healthy enough because 'this is Africa', and that being native, the items are naturally made to blend with the digestive apparatuses of Africans.

Most of the patrons were not fully aware of the health implications. Only 46% of respondents indicated, agree, and strongly agree to the items in the questionnaire which sought to test this awareness by asking if the respondent was aware that diseases like typhoid fever and dysentery could be spread through street foods. Also only 31% of the respondents ever cared to look at health/disease prevalence statistics of the State, and this was among the higher socio-economic class 44%, the middle 47%, and the lower 9%.

These findings are in tandem with reports from other parts of the world. Differences in culture, social stratification and industry have resulted in different patterns of how family street vendor enterprises are traditionally created and run in different parts of the world. For example, few women are street vendors in Bangladesh, but women predominate the trade in Nigeria and Thailand. Again, Filipino cultural attitudes towards meals is one cultural factor operating in the street food phenomenon there because eating food out in the open, in the market or street or field is not at odds with the meal indoors or at home (Tinker, 2012). This implies that patronage of street foods in Filipinos is not determined by social class, level of education or gender.

#### **V. CONCLUSION**

Urbanization and globalization has led to increase in the street food businesses in South-East Nigeria, and Anambra state especially. The poverty and destruction of both economic and traditional values of the Igbo that followed the Nigeria/Biafra war gave impetus to the street food phenomenon in this part of Nigeria. Although people of all socio-economic classes patronize these foods, their reasons differ. One common denominator however is that street foods possess high consumatory quality. Results obtained from this study pointedly suggest that this business has come to stay; since gender, level of education and social class do not significantly affect patronage. It is therefore predicted that the street food business in Nigeria will continue to expand.

#### **VI. RECOMMENDATIONS**

The Government, through the National Agency for Food and Drug Administration (NAFDAC) should monitor street food vendors and regulate the trade for safety. Secondly, local governments should get involved in making the trade more organized, so as to reduce road traffic accidents and traffic jams consequent on the street food businesses.

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