

## Social Factors As Determinant of Vended Food Consumption Patterns among Auto-Technicians in Ibadan Metropolis

<sup>1</sup>Alagbe, Akintunde,

<sup>2</sup>Kabuoh, Margret &

<sup>3</sup>Egwuonwu, T.K.

<sup>1,2&3</sup>Department of Business

Administration and Marketing

Babcock University, Ilishan-  
Remo

Ogun State, Nigeria

### Abstract

To meet the growing demand for vended foods of an increasing population, the need to develop marketing policy and strategy cannot be ignored for better management of consumer behaviour and understanding of food consumption patterns. This study therefore investigated social factors as the determinants of consumption patterns of vended foods among auto-technicians in Ibadan metropolis. The study employed the survey research design. The population consisted of 5,468 registered members of National Auto and Technical Association (NATA) in 11 Local Government Areas in Ibadan metropolis, out of which 2,014 members were selected through scientific sampling method. Data generated were analysed using frequency, mean, standard deviation and regression analysis at 0.05 alpha level. The findings revealed that social factors ( $F_{.stat} = 181.624$ ;  $R^2 = 0.295$ ;  $p(.000) < .05$ ). The study concludes that social factors are determinants of food consumption patterns among auto-technicians in Ibadan metropolis. For this reason, this study recommends that social factors (environment, health, family, religion) should be imbibed and considered in the development of marketing strategies and tapping of marketing opportunities. Occupational change is recommended to improve standard of living which enhances employment.

**Keywords:** *Social factors, Consumption pattern, Vended foods, Auto-technicians & marketing opportunities.*

Corresponding Author  
Kabuoh, Margret

### **Background to the Study**

Obayelu, Okoruwa and Oni (2009) report that food consumption has been a subject of research all over the world. It is especially meaningful in Nigeria where food expenditures account for a relatively large share of household income. Study on food consumption patterns by Dunne and Edkins (2005) also sheds light on food related nutritional policies. Obayelu, Okoruwa and Oni (2009) report that food consumption has been a subject of research all over the world. It is especially meaningful in Nigeria where food expenditures account for a relatively large share of household income. Study on food consumption patterns by Dunne and Edkins (2005) also sheds light on food related nutritional policies.

The street food industry plays important roles in developing countries such as Nigeria in meeting the food demand of urban dwellers. Vended foods feed millions of people daily with a wide variety of foods that are relatively cheap and easily accessible (Latham, 1997). Hawkers of street foods also perform a number of services for the urban population, especially for the economically weak. They sell cooked foods, fresh-vegetables, household goods, clothes and other articles of consumption. Their rates are usually considered lower than those charged by shops and stores and hence affordable to the larger urban populace (Tinker & Fruge, 1982).

Food consumption, according to Sobal, Carole, Carol, and Jostran (2006) involves the selection and consumption of foods and beverages, taking into consideration what, how, when, where, and with whom people eat as well as other aspects of their food and eating behaviours to even include the ways people obtain, store, use and discard the left overs. Food choices play an important role in symbolic, economic and social aspects of life by expressing preferences, identities and cultural meanings. Food consumption is important from a marketer's perspective because it creates demand for suppliers in the food system: who produces, processes and distributes food (Me-Nsope, 2013). Food consumption is also about determining which nutrients and other substances enter a body and subsequently influence health, morbidity and mortality. Food consumption patterns, like any complex human behaviour are influenced by many interrelating factors. It is not essentially and entirely determined by physiological or nutritional needs, but is also influenced by psychological, social, cultural, situational and marketing mix variables (Brassington & Petit, 2006; Rajagopal, 2010). Worthy of note for example, is that the environment in which individuals are brought up has a very strong influence on the types of food choices made and consumed. The type of social interactions will also have profound effects on consumers' view of foods and eating behaviour (Iyangbe & Orewa, 2009; Witchell & Sheeshka, 2011).

The activities of auto-technicians vary extensively, from auto-construction and building, auto-repair and transport. According to FAO (2003) informal workers overwhelmingly earn low income and have limited purchasing power, thus affecting their choice of foods. For this reason, there is need to explore the consumption patterns of vended foods by these informal workers.

### **Statement of the Problem**

In Nigeria, there is limited data on people who consume vended foods. Also, understanding the complex interaction of consumers with its environment, health, religion and family life cycle are other factors mitigating against effective food products marketing and

consumption (Obayelu, Okoruwa & Oni, 2009), that has not been effectively explored with particular reference to vended foods in relation to auto-technicians. Furthermore, unclear perception of attributes of food importance by the consumer has also hindered effective food product development with particular references to vended foods (Nwaegbure, 2001).

In the same vein, the dimension which vended foods has assumed in Nigeria also affects consumer buying decisions thus posing a great marketing challenge (Sowunmi, Aroyeun, Okoruwa & Biobaku, 2009). The market expenditure of street food accounted for ₦15.7trillion per year, representing 64.7 percent household expenditure at national level, while 22.7 percent of the highest overall household expenditure is recorded for South-West region and vended foods accounts for approximately 25 percent in Ibadan (NBS, 2010) – revealing a large and relatively untapped market. There has been a great reliance by marketers on the use and application of the marketing mix variables that is 4Ps - Product, Place, Promotion and Price in determining the consumer buying decisions. But, emergence of the field of consumer behaviour has made us to know that there are more factors beyond the 4Ps and these are psychological, socio cultural and environmental factors (Kotler & Keller, 2006).

### **Objective of the Study**

This study majorly elicits the determinant of food consumption patterns of auto-technicians in Ibadan metropolis. Specifically, the study intends to:

Assess the influence of social factors on food consumption patterns among auto-technicians in Ibadan.

### **Research Question**

How do social factors influence food consumption patterns among auto-technicians in Ibadan?

### **Hypothesis**

Ho: There is no significant relationship between social factors and food consumption patterns among auto-technicians in Ibadan.

### **Conceptual Clarifications**

#### **Social Factors of Informal Workers**

Social factors refer to these facts and experiences that influence or control an individual's personality, attitude and lifestyle (Maio, Verplanken, Manstead, Stroebe, Sheeran & Conner, 2007). These factors help an individual live well and in harmony with others in the society. Talbot (2007) describes social factors as an aspect of life that affects and influences the human behaviour in the society. It dictates how individual behaves in the society. In addition, Kurani and Turrentine (2002) refer to social factors as factors that affect or direct or guide people's lifestyles in a given society. Some of these factors are: religion, ethnicity, family, economic status, health status and education (Ndungu, 2006; Alonso, 2015). These factors are present in a multi-cultural society. In this study the following factors such as physical environment, health status, religion and family life cycle are reviewed.

Physical environment is defined as a section of the human environment comprising physical factors such as water supply and climate (Troped, Wilson, Matthews, Cromley & Melly 2010). Bolivar, Daponte, Rodriguez and Sanchez (2010) also describe the term physical environment as the material surroundings of a process, system or organism. To Cole, Foden, Robinson and Wilson (2010), physical environment means the area surrounding every individual. Similarly, Woythal (2015) describe physical environment as the material and tangible conditions in which people live. Therefore, physical environment includes: natural environment (e.g. air, water, noise and green space), built environment (e.g. houses, road transport systems, buildings, infrastructures) and socio-economic and cultural factors. Socio-economic factors refer to both the social and economic characteristics of the societies and communities in which people live.

### **Food Consumption Patterns in Nigeria**

Food consumption patterns are defined as the recognizable ways of eating foods (Ene-Obong, 2001). National Bureau of Statistics (2010) report that consumption patterns of a country represent the aggregate demand of goods and services in the country, and in most cases they constitute about 60 percent of the total gross domestic product (GDP) of the country. Similarly, NBS (2010) also describes consumption patterns as the level of welfare and poverty that a nation is experiencing. Consumption patterns are closely related to the type of food commodities grown or produced in different areas (King, Nwanyelugo, Ene-Obong & Ngoddy, 1985). In the Southern part of Nigeria, the major food products include starchy roots and tubers and starchy fruits (plantain and banana), cereals (maize and rice) and some legumes, while cereals are the dominant staples food in the northern part of Nigeria (NBS, 2010). These provide, about 80% of daily energy intakes (NBS, 2010). Protein is derived mainly from cereals, legumes and meat produced in substantial amount in this area. The nomadic population consumes some quantity of milk, being cattle rearers (NBS, 2010).

### **Informal workers**

Informal workers generally refer to the people who work with no official contract arrangement. As described by Foundation for Labour and Employment Promotion (2012), informal workers are those who work with no official contract arrangement. World Bank (2011) also describes informal workers as the people who cannot find a job in the formal sector. Bouzid (2013) describes informal workers as home-based workers, industrial outworkers and temporary workers. In addition, Uber (2011) refers to informal workers as part time workers. Informal workers are present in every sector of Nigerian economy,

### **Theoretical Review**

#### **Social Cognitive Theory**

Social Cognitive Theory is developed by Bandura (1986). This theory emanated from the field of psychology. The main components of this theory are environmental factors, personal factors and behavioural factor (Bandura, 1986; Reynolds et al, 1999). Reynolds et al, (1999) state that the environment, individual's behaviour and characteristics continuously affect one another. Environment in this theory refers to physical, social and institutional surroundings in which an individual must regularly cope and in which individual's

behaviour takes place (Kirby, et al. 1995). Based on this theory, associations were found between motivation (food outcome expectancies and preference)

## **Empirical Review**

### **Social Factors and Food Consumption Patterns**

Several studies on determinants of food consumption patterns have been carried out particularly on social factors, (for example environment, health, religion and family structure) (Nicklas, Baranowski, Kullen, Rettenberg & Olverg, 2001; Patrick & Nicklas, 2005; Raghavendra, 2007; Shaharudin, Pani, Mansor, Elias & Sadek 2010; Witchell & Sheeshka 2011). Many studies have also related environment with food consumption. For example, Wasink (2004) examined environmental factors that increased the food intake and consumption volume of unknowing consumers. The study showed that package size, plate shape, lighting, socializing, and variety were environmental factors that influenced the consumption volume. The study also revealed that environmental factors appeared unrelated, but generally influenced consumption volume through inhibiting consumption monitoring and alternative consumption norms.

### **Methodology**

A survey research design was used in this study. According to Kpolovie (2010) survey research design is majorly used for studying relationship or interrelationships that existed between dependent variable (criterion) and independent variable as well allow variables to be measured at the same time. A structured questionnaire was adopted and classified into two sections: **Section A** of the questionnaire elicited respondents' demographic information such as gender, age, marital status, religion, income status, educational level, household size and ethnicity. **Section B** of the questionnaire was designed to measure the extent of social factors on consumption of vended foods. The Twenty (20) items in this section was anchored on 6-point Likert scale (1=strongly disagree, 2= disagree, 3= fairly disagree, 4= fairly agree, 5=agree, 6=strongly agree). The items measured four (4) variables of social factors, which include: environment, family, health and religion. The scoring modality for the scale is such that higher scores indicate high social factors and lower scores represents low social factors. In this study, 20-items yielded reliability alpha coefficient of 0.83.

### **Population of the Study**

The study population was comprised of all registered auto-technicians of National Auto and Technical Association (NATA) in Ibadan metropolis. Ibadan metropolis. In this study, data collected were analyzed using both descriptive statistics and inferential statistics. Descriptive statistics of frequency distribution, percentage, mean and standard deviation were used to analyze the demographic information and research questions. Afterward, inferential statistics of multiple regression analysis was used to test the determinants of food consumption patterns among auto-technicians. This exhibited the magnitude of the effects of psychological factors, food product, dimension of vended food and social factors on food consumption patterns of auto-technicians in Oyo State. To test for the significance of the effects on isolated variables on the explanatory, the study adopted the t-statistics, while the F-ratio was used to test for the aggregates of the explanatory variables using the following decision rule:

If  $F_{\text{calculated}} > F_{\text{tabulated}} = \text{reject the } H_0 \text{ and or } F_{\text{calculated}} < F_{\text{tabulated}} = \text{accept the } H_0.$

**Table 3.1: List of Registered NATA's Members in each LGAs in Ibadan Metropolis**

S/No.	LGAs	No. of Registered NATA members
1	Ibadan North	655
2	Ibadan North-East	570
3	Ibadan North-West	340
4	Ibadan South-East	635
5	Ibadan South-West	778
1	Akinyele	360
2	Egbeda	300
3	Oluyole	820
4	Ona-Aara	490
5	Iddo	275
6	Lagelu	245
<b>11</b>		<b>5,468</b>

**Source:** Adeyeye (2006) and NATA (2014)

### Sample Size and Sampling Techniques

This study adopted the stratified sampling technique. This method was used to classify the LGAs into strata (that is, Inner and outer cities of Ibadan) and this gave five (5) LGAs in the inner city of Ibadan and six (6) LGAs in the outer city of Ibadan (See Table 3.2). In determining the sample size, the formula of Paler-Calmorin and Calmorin (2007) was adopted in this study. This method was used because it was considered one of the best methods for determining the sample size in probability sampling. Therefore, the sample size was computed as:

$$S_s = \frac{NV + [Se^2(1-p)]}{NSe + [V^2 p(1-p)]}$$

$S_s$  = Sample size  
 $N$  = Total number of population = 5,468  
 $V$  = Standard value (2.58) at 1% level of probability with 0.99  
 $Se$  = Sampling error (0.01)  
 $p$  = Largest possible proportion (0.50)

Therefore, the total sample for this study was 2,014 respondents. Proportionate sampling method was adopted to finally select the sample size from the population.

**Table 2: Computed Samples for Population at 0.01 Level of Probability to a Proportion of 0.50**

Ibadan	S/No.	LGAs	No. of Registered NATA members	Scientific determination of sample size
Inner City	1	Ibadan North	655	206
	2	Ibadan North-East	570	200
	3	Ibadan North-West	340	173
	4	Ibadan South-East	635	204
	5	Ibadan South-West	778	213
Outer City	1	Akinyele	360	176
	2	Egbeda	300	166
	3	Oluyole	820	215
	4	Ona-Aara	490	193
	5	Iddo	275	161
	6	Lagelu	245	107
<b>Total</b>	<b>11</b>		<b>5,468</b>	<b>2014</b>

**Table 3: Influence of Social Factors on Food Consumption Patterns among Auto-technicians in Ibadan**

S/No.	Environment	SD	D	FD	FA	A	SA	$\bar{X}$	Std.D.
1	Street foods are being prepared in an environmentally friendly way	-	432 (24.7%)	434 (24.8%)	217 (12.4%)	133 (7.6%)	532 (30.4%)	3.37	1.95
2	Environment determines street foods consumption	432 (24.7%)	217 (12.4%)	-	-	532 (30.4%)	567 (32.4%)	3.34	1.61
3	Environment facilitates eating of street foods by people.	432 (24.7%)	434 (24.8%)	217 (12.4%)	-	133 (7.6%)	532 (30.4%)	3.32	2.04
4	Environment is always sociable when eating street foods	432 (24.7%)	217 (12.4%)	434 (24.8%)	133 (7.6%)	532 (30.4%)	-	3.07	1.55
5	Open environment influences my eating habit of street foods.	432 (24.7%)	651 (37.2%)	-	532 (30.4%)	133 (7.6%)	-	2.59	1.34
	<b>Health</b>	<b>SD</b>	<b>D</b>	<b>FD</b>	<b>FA</b>	<b>A</b>	<b>SA</b>	<b><math>\bar{X}</math></b>	<b>Std.D.</b>
6	Health determines street foods consumption	432 (24.7%)	-	-	217 (12.4%)	567 (32.4%)	532 (30.4%)	4.19	1.93
7	Street foods cause health diseases	432 (24.7%)	217 (12.4%)	217 (12.4%)	133 (7.6%)	-	749 (42.8%)	3.32	1.68
8	Eating street food is a threat to health	-	432 (24.7%)	532 (30.4%)	350 (20.0%)	434 (24.8%)	-	3.20	1.46
9	Street foods have long-term negative effects on health	432 (24.7%)	-	749 (42.8%)	133 (7.6%)	434 (24.8%)	-	3.10	1.43

<b>10</b>	<b>Eating street food can make one gain weight</b>	<b>432</b> (24.7%)	<b>434</b> (24.8%)	<b>532</b> (30.4%)	<b>350</b> (20.0%)	-	-	<b>2.46</b>	<b>1.07</b>
	<b>Religion</b>	<b>SD</b>	<b>D</b>	<b>FD</b>	<b>FA</b>	<b>A</b>	<b>SA</b>	$\bar{X}$	<b>Std.D.</b>
<b>11</b>	My religion discourages the eating of street foods	123 (7.0%)	276 (15.8%)	220 (12.6%)	-	1006 (57.6%)	123 (7.0%)	4.06	1.50
<b>12</b>	Street foods have religious implications	123 (7.0%)	276 (15.8%)	220 (12.6%)	2 (0.1%)	1004 (57.4%)	123 (7.0%)	4.06	1.50
<b>13</b>	Religion determines street food consumption.	123 (7.0%)	276 (15.8%)	220 (12.6%)	-	1129 (64.6%)	-	3.99	1.43
<b>14</b>	Street foods are in harmony with my religious views	166 (9.5%)	483 (27.6%)	217 (12.4%)	-	749 (42.8%)	133 (7.6%)	3.62	1.64
<b>15</b>	People prefer street foods prepared by co-worshippers	166 (9.5%)	700 (40.0%)	217 (12.4%)	-	532 (30.4%)	133 (7.6%)	3.25	1.62
	<b>Family Structure</b>	<b>SD</b>	<b>D</b>	<b>FD</b>	<b>FA</b>	<b>A</b>	<b>SA</b>	$\bar{X}$	<b>Std.D.</b>
<b>16</b>	Family determines street foods consumption	-	-	574 (32.8%)	-	552 (31.6%)	622 (35.6%)	2.92	1.64
<b>17</b>	Street foods strengthen our family mealtime	-	429 (24.5%)	-	-	698 (39.9%)	621 (35.5%)	2.84	1.80
<b>18</b>	All my family members regard eating street foods as good habit	-	429 (24.5%)	-	-	698 (39.9%)	621 (35.5%)	2.84	1.80
<b>19</b>	Street foods are consumed because my family have members busy schedules most days of the week	-	431 (24.7%)	-	575 (32.9%)	123 (7.0%)	619 (35.4%)	2.52	1.43
<b>20</b>	All my family members eat street foods	619 (35.4%)	431 (24.7%)	-	575 (32.9%)	123 (7.0%)	-	2.52	1.43

Note:  $\bar{X}$ = mean, Std.D = Standard deviation, SA=Strongly Agree, A=Agree, FA=Fairly Agree, FD=Fairly Disagree, D=Disagree, SD=S  
**Source:** Researcher's Field Survey Result (2015)



Table 2 shows the respondents' opinion on the influence of social factors on food consumption pattern. The result reflects on environment, health, religion and family structure of auto-technicians on consumption pattern of street food. The result reveals that environment as a social factor determines consumption of street foods ( $\bar{X}= 3.34$  Std.D=1.61) and majority of the auto-technicians in Ibadan consent that street foods are being prepared in an environmentally friendly manner ( $\bar{X}= 3.37$  Std.D=1.95). A significant number of auto-technicians also claim that environment facilitates their eating of street food ( $\bar{X}= 3.32$  Std.D=2.04) and environment is always sociable when eating street foods ( $\bar{X}= 3.07$  Std.D=1.55). But a significant number of auto-technicians against that open environment influence their eating habit of street foods ( $\bar{X}=2.59$  Std.D=1.34).

The result also reveals that health determines street foods consumption ( $\bar{X}=4.19$  Std.D=1.93) as majority of auto-technicians agree that street foods give them concern about their health status ( $\bar{X}=3.32$  Std.D=1.68), pose threat to their health ( $\bar{X}=3.20$  Std.D=1.46), have long-term negative effects on their health ( $\bar{X}=3.10$  Std.D=1.43) and make them to gain more weight ( $\bar{X}=2.46$  Std.D=1.07). Furthermore, the result shows that street foods have religious implications ( $\bar{X}=4.06$  Std.D=1.50), as majority of the auto-technicians claim that their religion discourages them from eating street foods ( $\bar{X}=4.06$  Std.D=1.50) and agree that eating of street food is not in harmony with their religious beliefs ( $\bar{X}=3.62$  Std.D=1.64). Because of the religious implications that street food has, a significant number of auto-technicians as revealed in the result declare that they do not prefer street foods prepared by their co-worshippers ( $\bar{X}=3.25$  Std.D=1.62). This indicates that religion as a social factor also determines street food consumption ( $\bar{X}=3.99$  Std.D=1.43).

Furthermore, the result shows that family structure determines street food consumption ( $\bar{X}=2.92$  Std.D=1.64). Most of the auto-technicians are of the same opinion that street foods strengthen their family mealtime ( $\bar{X}=2.84$  Std.D=1.80) and agree that all their family members eat street foods ( $\bar{X}=2.52$  Std.D=1.43) and feel eating street foods is a good habit ( $\bar{X}=2.84$  Std.D=1.80). The result also reveals that street foods are consumed by the auto-technicians because of their family busy schedule.

It is apparent from the above result that environment, health, religion and family structure of auto-technicians determines their consumption pattern of street food. The result reveals that environment facilitates eating of street food by auto-technicians. This is due to the environmentally friendly manner in which street foods are prepared and offered in Ibadan. Though, the result establishes that the street foods which are environmentally prepared in Ibadan have religious dissonance and cause health diseases which pose threat and long-term negative effects on the health of auto-technicians. Even though most of the auto-technicians claim that street foods cause health risk to their health, majority of them still concur that all their family members eat street foods because of their family busy schedule.

## Conclusion

Environment as identified as social factor in the study was negatively and significantly related with food consumption patterns while health, religion and family structure were positively and significantly related with food consumption patterns of auto-technicians in

Ibadan. Social factors (environment, health, religion and family structure), were determinants of consumption patterns of street foods among auto-technicians in Ibadan. Large percentage of auto-technicians in the study belongs to low income groups, this is due to their very low economic status which has led to continuous patronage of vended foods.

### **Recommendations**

1. There is need for auto-technicians in Ibadan metropolis to imbibe social factors to align with food consumption patterns.
2. To meet the growing demand of street food consumption of an increasing population in Nigeria, there is need for food manufacturing companies to tap into the growing market of the vended foods through effective market profiling.
3. It has become necessary from the study findings to recommend change in occupational pattern and minimum wage act should be enforced by government so as to improve their food consumption standard.
4. With the growing market of street food consumption, there is need to educate street food producers and sellers regarding better food processing, quality, safety and selling efforts through health talk, road show or even campaign to encourage more people to prepare healthy food. This will not only benefit individual consumers but will also make the market grow, which will in turn bring benefits to the country such as more employment, more export and hence improved funds inflow.

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