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Fast Food Consumption Pattern among Youth in Ogbomosho Metropolis of Oyo State, Nigeria

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Abstract

Fast food has become a prominent feature of diet and has grown into a dominant dietary pattern among youth worldwide. It is difficult to escape noticing the colourful edifice and bill boards of these food outlets, one is probably just around the corner of your street. Mr Biggs, Tastes Fried Chicken, Sweet Sensation, Big Treat, Favourite etc. Due to competitive nature of the market many of the food outlets market have started to blend their menus with African cuisines like Pounded Yam, Amala, Moin-Moin, Eda, Semovita, Fufu etc. This study analyzed fast food consumption pattern among the youth in Ogbomosho metropolis of Oyo State, Nigeria. Data were collected randomly from two hundred (200) respondents with the use of structured questionnaire. Data was analyzed using descriptive statistics, Logit and Tobit regression analysis. Data analysis revealed that 68% of the respondents were male, 92% were singled, 86.5% had tertiary education, 71% are Christians while 72% of the respondents were students. Average age was 24.5 years. The factors affecting the respondents decision to consume fast food are gender, hours spent in watching television, income, education and hours spent at work/school.

Keywords:

Fast food, Consumption, Youth, Tobit.

INTRODUCTION

Fast foods are convenience foods that can be prepared and serviced very quickly. On average basis, one-fifth of the population of the USA (45million people) eats in a fast-food restaurant each day. Although it is possible to eat nutritious fast foods, menus tend to be stacked with items high on most dietitians. (Jakle and Keith, 1999).

Fast foods are hot foods that are served very quickly in special restaurants and or often taken away to be eaten in the streets. The source of these fast foods is referred to as eatery or restaurants. Fast food which has become prominent of the diet, from its origin in the 1950' has grown into dominant dietary patterns among youths worldwide. Food eaten habits in general are influenced by socio cultural background, religious beliefs, customs and individual taste. But among youths there may be some added reasons for adopting fast food culture. Fast food did not replace any major meal and seemed to occasionally add to daily diet (Schlosser, 2001).

Fast foods include salty french fries, beef burgers, fried chicken, and pizzas with a thick cheese covering. These appeal to the western palate by being fatty, low in fibre and nutrients, but high in salt (one beef burger can contain more than 1000 milligrams of sodium). To make matters worse they are often served with sugar – laden soft drinks or Creamy milkshakes full of empty calories or fat (Schlosser, 2001).

Those individuals who regularly eat fast foods may have to be particularly selective, moderating the intake of unhealthy options and choosing healthy options, such as salads with low-fat dressings, wholegrain buns, skimmed milk, and various kinds of fruity foods etc, which will help in controlling excess energy associated with eating fast food with high fat items and avoiding side items such as; French fries and soft drinks. Ben (2001) said that these different classes of food are eaten at different occasions and for different reasons e.g. starchy food such as cassava is believed to be one of the cheapest sources of calorie/ energy food crop in Africa. In Nigeria, the average calorie intake per capita is 2204cal as against 2500kcal recommended by FAO for standard minimum daily requirement

(Aromolaran, 2004).

In the recent times, fast food consumption has increased globally particularly in developed countries. For instance, in China, more Chinese are now eating outside the home in restaurants. Ham (2004) observed that consumer's demand for fast food increased, thus causing increment in the number of food services industries in united state and Korea. In Nigeria presently, there is springing up of more fast food joints, commercial food centers (canteens, cafeteria and restaurants), hawkers and street vendors. Despite this observation, little or no research has been done on the food habits of youth in relation to fast food consumption. Hence, this study aims at examining fast food consumption pattern among youth in Ogbomosho metropolis of Oyo State, Nigeria.

Household demand for fast food

Fast food meal decisions are made in the context of a complex product, demographic and geographic space. We account for this level of complexity by synthesizing the discrete/continuous choice model of Hanneman (1984) with the Distance Metric (DM) model of Pinkse *et al.*, (2002) and Pinkse and Slade (2004). Among other empirical studies, Dubin and McFadden (1984) develop an approach similar to Hanneman (1984) in estimating a model of appliance and electricity consumption demand more recently (Chaing 1991; Chitangunta, 1993; Arora, *et al.*, 1998; Vaage 2002; and Nair *et al.*, 2005) estimate household level models in which consumers make discrete choices of a logit form and then consume continuous quantities according to demand equation derived from a consistent indirect utility frame work. Smith (2004) presents a discrete. continuous model of retail supermarket choice and expenditure, but uses aggregate rather than household data and does not incorporate store-attributes in a spatial sense.

Estimating an inherently spatial model allows for more flexible marketing response parameters because the distances between observations in attribute space (Pinkse and Slade, 2004) defining price response in terms of the distance between choices not only affords a degree of flexibility

that is absent in traditional discrete / continuous choice models but also provides a direct tests of whether fast food companies tend to differentiate their offerings in order to gain market power, or mimic competitors in hostelling market-share battle (Slade, 2004). More important for the purposes of this paper, they are able to test whether spatial (differentiation) or temporal (habit) distance between choices influences whether promotional strategies have an allocative or expansive effect on demand. Further, they specify and estimate the model at the consumer level and draw implications for aggregate demand but integrating over the distribution of consumer heterogeneity exposit. By controlling for unobserved heterogeneity, which oftener confounds, the identification of state – dependent demand, we are able to test whether habits, loyalty or perhaps addiction are important factor in determining fast food demand. This study will use both Logit and Tobit to examine the relationship between some selected variables and participation decision and expenditure decision respectively.

MATERIALS AND METHODS

This study was carried out in Ogbomoso metropolis of Oyo State; Ogbomoso is located geographically between latitude 8^o and 9^o west and longitude 4^o and 5^o North of the equator (Oyo State Survey, 1990). Ogbomoso shared territorial boundary with Oyo, Ilorin, Ejigbo and falls in the rainforest and derived Savanna Zone of the Country's biomes. Ogbomoso is conveniently divided into two local governments namely Ogbomoso North, and Ogbomoso South. Ogbomoso is very popular for her men of valour and many provincial chiefs and king typical of Yoruba Kingdom.

According to the population census of the area conducted in 2006 the estimated population in the area was 299535 (NPC, 2006). All youths that consumes fast food in Ogbomoso metropolis area of Oyo State constitute the population of this study. Ogbomoso metropolis consists of Ogbomoso south and North LGA. Ogbomoso metropolis is the home to Ladoke Akintola University of Technology.

Multistage sampling procedure was adopted.

Purposive sampling was adopted to focus on the youth in this area between age 18 and 35 years while a systematic random technique was applied to select 200 youths in the study area. Primary data was collected through the use of copies of well structured questionnaire.

Analytical tools that was used for this study are descriptive statistics, Logit and Tobit regression model.

Logit and tobit regression model

Consider a relationship between fast food, Y and a matrix of socio-economic, X formulating linear regression modal yields

$$Y = X\beta + e \quad (i)$$

Where e represents unknown error terms and β are parameters to be estimated. Given the censored survey data for fast food, Tobit limited dependant variable models where estimated.

A Logit model is specified to identify the relationship between socio-economic variables and an individual's likelihood of purchasing fast food in "Participation decision is modeled by

$$P(y_i > 0) = e^{\beta x_i} / (1 + e^{\beta x_i}) \quad (ii)$$

Where individual Demographics variables include gender, age, hours spent at work per day, time spent to watch television, monthly income and year of education.

The "Expenditure Decision" as a function of socio demographics variables. For the Tobit regression model (Tobin 1958), household fast food expenditure is modeled as

$$\Sigma(y_i) = \Phi\left(\frac{\beta X_i}{\sigma}\right) \left[\beta X_i + \frac{\phi\left(\frac{\beta X_i}{\sigma}\right)}{\Phi\left(\frac{\beta X_i}{\sigma}\right)}\right] \quad (iii)$$

Where $\phi\left(\frac{\beta X_i}{\sigma}\right)$ and $\Phi\left(\frac{\beta X_i}{\sigma}\right)$ represent the normal probability density and cumulative distribution functions.

RESULTS AND DISCUSSION

Socio economic characteristics of the respondents

The data in table 1 shows that 68.0% of the youths consuming fast food are male while 32.0% are female. This implies that consumption of fast food among youth is dominated by male in the study area. This may be due to time con-

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Table 1: Socio- economic characteristics of the respondents (n=200)

Gender	Frequency	Percentage (%)	Cumulative (%)
Male	136	68.0	68.0
Female	64	32.0	100.0
Total	200	100.0	
Age (years)			
17-22	69	34.5	34.5
23-28	99	49.5	84.0
29-34	30	15.0	99.0
35 above	2	1.0	100.0
Total	200	100.0	
Marital Status			
Single	184	92.0	92.0
Married	16	8.0	100.0
Total	200	100.0	
Highest Education			
Secondary	23	11.5	11.5
Tertiary	173	86.5	98.0
Others	4	2.0	100.0
Total	200	100.0	
Religion			
Christian	142	71.0	71.0
Islamic	58	29.0	100.0
Total	200	100.0	
Occupation			
Student	144	72.0	72.2
Civil Servant	45	22.5	94.5
Artisan	7	3.5	98.0
Business	4	2.0	100.0
Total	200	100.0	

Source: Field Survey, 2009.

straint and hours spent at work / school by the youth in the study area. The table also shows that 49.5% of youth consuming fast food in the study area falls within the age bracket 23-28 years. The mean age is 24.47 years. This implies that most of the youths consuming fast food in the study area are in their growing age. It could be observed that most of the youths consuming fast food are doing this due to their busy schedule.

The table reveals that 92.0% are single while only 8.0% are married. This connotes that more of singles consumes fast food in the study area. The data in table 1 shows that 86.5% of the respondents has tertiary education, 11.5% has secondary education while 2.0% has one form of education or the other. This means that most of the respondents that consume fast food in the study area are educated. The table further reveals that 71.0% of the respondents are Christian while 29.0% are Islamic faithful. This means that large numbers of the respondents are Christian faithful. In essence, there is no religious

barrier to fast food consumption in the study area. Also, table also indicates that 72% of the respondents are students, 22.5% work in the public sector 3.5% are artisans while only 2.0% are into private business. This results implies that most of the respondents that consume fast food are students (Table 1).

Consumption of fast food

According to the results presented in table 2, almost all the respondents (90.0%) consume fast food while only 20.0% does not consume fast food. This implies that fast food consumption is a common habit in the study area. Table 2 also reveals that 33.3% of the respondents consume fast food as lunch, 29.4% consume fast food at any pleases time, 17.8% take fast food as breakfast, 12.8% as main meal while 6.7% consume fast food as dinner. This implies that large number of the respondents consume fast food as lunch because at this time most of the respondents would be either at school (University)

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Table 2: Distribution of respondents by consumption of fast food

Fast food Consumption	Frequency	Percentage (%)	Cumulative percentage
Consume fast food	180	90.0	90.0
Not consume fast food	20	10.0	100.0
Total	200	100.0	
Method			
Lunch	60	33.3	33.3
Anytime	53	29.4	62.7
Breakfast	32	17.8	80.5
Main meal	23	12.8	93.3
Dinner	12	6.7	100.0
Total	180	100.0	
Weekly consumption			
≤3	93	51.7	5.1
4-6	70	38.9	90.6
7-9	14	7.8	98.4
≥10	3	1.6	100.0

Source: Field survey, 2009.

or at work. The number of times of consuming fast food per week is also presented on the table. About half of the youth population in the study area (51.7%) visit fast food outlets three times or less per week, very close to this are respondents that visit the outlets between 4 to 6 times per week (38.9%). Only 1.6% respondents visit fast food outlets for about 10 times or more (Table 2).

Sources of getting fast food

The data in Table 3 shows that 57.5% of the

respondents always visit Alata Milk & Honey, 55.0% always visit Mr. Biggs, 47.5% always visit Amazing Grace, 20% visit Lagos, while 10.5% visit some other places that are not popularly known likewise some visited places like Blue velvet, Waheeds place, and Kolarintz. The table also shows that 48.0% of the respondents choose the fast food outlet for quality products, 43.0% of them choose fast food outlets due to its closeness, 37.5% claimed to visit outlets for the taste while 27.0% of the respondents choose

Table 3: Sources and reasons for fast food consumption.

*Sources of fast food	Frequency	Percentage (%)
Alata Milk & Honey	15	57.5
Mr. Bigg's	110	55.0
Amazing Grace	95	47.5
Lagos	40	20.0
Others (not popular)	21	10.5
Blue Velvet	10	5.0
Kolarintz	8	4.0
Waheeds	8	4.0
*Reason for the choice		
Quality	96	48.0
Closeness	86	43.0
Taste	75	37.5
Price	54	27.0
Hours spent at work / school	7	3.5
Others	5	2.5
*Reason for eating fast food		
Hour spent at work/school	88	44.0
Time constraint	71	35.5
Change of taste	65	32.5
Nature of job	28	14.0
Other reason specify	9	4.5

*Total percentage greater than 100 due to multiple responses.

Source: Field Survey, 2009.

Table 4: Logit results of participation decision.

Variable	Coefficient	Standard error	t	P[Z >Z]
Constant	4.547	2.274	2.00	0.046
Gender	0.119	0.038	3082***	0.002
Age	0.014	0.071	0.205	0.838
HSW	-0.011	0.015	-0.703	0.482
HSWTV	0.357	0.188	3.015***	0.000
Income	-0.149	0.089	-1.680*	0.093
Education	-0.014	0.007	-2.088**	0.041
Log likelihood Function	-55.492			
Restricted log likelihood	-62.791			

*** P < 0.01 ** P < 0.05 * P < 0.10

Source: Data analysis, 2009

the place because of the relative food prices while others did because of some other reasons like hours spent at work/school. It result further reveals that 44.0% of the respondents eats fast food due to long hours spent at work / school, 35.5% was due to time constraint to prepare food at home, 32.5% claim to consume fast food due to need to have a change of taste while others consume it due to some reasons like nature of job which may be energy consuming. This implies that the consumption of fast food is due to one or two reasons (Table 3).

Result for participation

Results are reported for both the participation and expenditure models attempts to identify the factors that influence the decision of individual to consume or not consume fast food for a given meal. The expenditure model establishes an empirical relationship between household expenditure and factors determining amount of expenditure. The intercept term in

each model represents the representative individual, when continuous variable are equal to zero.

Participation decision

Factors that may influence the decision of the individuals to consume fast food or not consume fast food for a given meal are many. They include gender, age, hours spent at work per week, time spent watching television, income and year of education. The logit model estimated was statistically significant with a likelihood ratio test probability < 0.002. The effect of gender on the probability of consuming fast food is presented in table 4. Gender positively influences the probability of consuming fast food. This implies that male consume fast food more than female

Hours spent watching television display a relationship with an individual's probability of consuming fast food. Individual who spent much hours watching television are most likely to consume fast food more than those that spent

Table 5: Tobit results of expenditure decision.

Variable	Coefficient	Standard error	t	P[Z >Z]
Constant	0.009	0.067	0.131	0.896
Gender	0.010	0.017	0.594	0.552
Age	0.003	0.002	1.306	0.192
HSW	0.002	0.0004	4.094***	0.000
HSWTV	0.005	0.004	1.048	0.295
Income	0.098	0.037	2.666***	0.007
Education	0.008	0.030	0.264	0.792
Sigma Sq	0.109	0.005	20.00	0.000
Log likelihood function	159.265			

*** P < 0.01

Source: Data analysis, 2009.

less time watching television. Income has negative relationship with an individual's probability of consuming fast food. Here the predicted probability of consuming fast food decreases with the income. The most likely individual to consume fast food is one who earns less income.

Years of education also display a negatives relationship with an individual's probability of consuming fast food. Educated youth are less likely than those less educated in consuming fast food (Table 4).

Expenditure decision

Expenditure for fast food by the youth was modelled as a function of variables. On the Tobit model relative to the Logit model, far fewer variables were significant. Hours at work and income appear to be the most important variables influencing household expenditure on fast food. Fast food expenditure increase as the hours spent at work and income increases (Table 5).

CONCLUSION

The study revealed that majority of people eat fast food more than the rate at which they eat at home. The reason is that most of them are single and in their study years with nobody to cook for them unless they did.

Also hours spent at work/ school was identified as one of the reason why many eat fast food. Nature of job has also led to increase in expenditure on fast food.

REFERENCES

- 1- Aromolaran, A.B. (2004). Intra-Household Redistribution of Income and Calorie Consumption in South-Western Nigeria. Center Discussion Paper 890. Economic Growth Center, Yale University and University of Agriculture, Nigeria.
- 2- Arora, N., Allenby, G. & Ginter, J.L. (1998). Hierarchical Bayes Model of Primary and Secondary demand. *Marketing Science*, (17): 29 - 44.
- 3- Saneur, B. (2001). The Food Consumption in the 21st Century: New Research Perspective, Department of Applied Economic, University of Minnesota.
- 4- Chiang, D. (1991). The Simultaneous Approach to the Whether, What and How Much to Buy Questions. *Marketing Science*, 10(4): 298 - 315.
- 5- Chintagunta, P.K. (1993). Investigating Purchase

incidence, Brand Choice and Purchase Quality Decisions of Households. *Marketing Science*, (12): 184-208.

6- Dubin, A. & McFadden, D.L. (1984). An Econometric Analysis of Residential Appliance Holdings and Consumption. *Econometrica*, (54): 345 - 362.

7- Ham, S. (2004). Household Profile Affecting Food Away from Home Expenditure: A Comparison of Korean and U.S households. *Journal of Hospitality Management*, 23(4): 363-379.

8- Hanemann, W.M. (1984). Discrete/Continuous Model of Consumer Demand. *Econometrica*, (52): 541-561.

9- Jakle, J.A. & Keith, A.S.(1999). *Fast Food Roadside Restaurants in Automobile Age*. John Hopkins University Press. ISBN 080186920X.

10- Nair, H., Dube, J.P. & Chintagunta, P.K. (2005). Accounting for Primary and Secondary Demand Effects with Aggregate Data. *Marketing Science*, (24): 444-460.

11- NPC (2006). *Census Provisional Results*. National Population Commission.

12- Pinkse, J., Slade, M.E. & Brett, C. (2002). Spatial Price Competition, a Semi Parametric Approach. *Econometrica*, (70): 1111-1153.

13- Pinkse, J., Slade, M.E. (2004). Mergers, Brand Competition and the Price of a Pint. *European Economic Review*, (48): 617-643.

14- Schlosser, E. (2001). *The U.S. Outcry Fast Food Nation the Dark Side of the American Meal*. Houghton Mifflin books. ISBN 0395977894.

15- Slade, M. (2004). *The Role of Economic Space in Decision Making* Working paper, Department of Economics University of Warwick, Warwick, UK. March.

16- Smith, H. (2004). Supermarket Choice and Supermarket Competition in Market Equilibrium. *Review of Economic Studies*, (71): 235-263.

17- Vaage, K. (2002). Heating Technology and Energy use, a Discrete/Continuous Choice Approach to Norwegian Household Energy Demand. *Energy Economics*, (22): 649-666.