

Evaluation of the status of tea consumption in Nigeria

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ABSTRACT

This study investigates the status of tea consumption in the study area. Random sampling technique was used to select Oyo and Ogun States from the Southwestern part of Nigeria where the study was carried out. Three Local Government Areas (LGAs) were randomly selected from the two States while a total of 120 tea consumers were randomly selected from the two States for the study. The information collected from the consumers was analysed using descriptive statistics and multivariate regression model. The result of the analysis shows that tea is consumed mostly by the respondents with the age bracket 31-40 years while consumers who are members of one association or the other consume more tea than those that are non-members. Furthermore, 91.7% of the respondents consume tea showing that tea is widely consumed in the study area and majority (85.8%) of the consumers consumed lipton tea. Majority (72.5%) of the consumers submitted that they consume tea because it is good for their health while 14.2% of the consumers claimed that they consume tea as a stimulant. The factors that significantly determine the quantity of tea consumption in the study area are age of consumer, gender of consumer, household size, frequency of tea consumption, tea purchasing point and the purpose of tea consumption. The study recommended that tea consumers should be sensitized on the need to consume tea on daily basis.

Key words: Status, tea, consumption, stimulant, consumers, descriptive.

Tea (*Camellia sinensis* (L) Kuntze) belongs to the family of theaceae. It is an evergreen bush which are processed as beverage. Tea is one of the most popular and lowest cost beverages in the world and consumed by a large number of people (Oluyole, 2015). A lot of tea is consumed in European countries as well as countries where it is produced. In Nigeria, consumption of tea is common among different categories of people. It is purchased and drunk at motor parks, bus stop and is hawked by different classes of people who earn their living through this means (Sowunmi, 2009). Tea is mostly drunk as hot beverage during cold weather and as iced tea during hot weather. Tea is a widely consumed beverage throughout the world (Geng, 1998). Tea plays an important role in human health by activating the central nervous system, which may aid the body's ability to burn calories and unwanted fats through thermogenic process. The phenol groups in tea are extremely active, easily able to capture and neutralize free radicals and other pro-oxidants. It has been found that tea is over 200 times more powerful than vitamin E in neutralizing pro-oxidants and free radicals that attack lipid (oil and fats), it is also 20 times more potent than vitamin E in reducing the formation of dangerous and potentially mutagenic peroxide that form

in rancid fats and lard (Hudson and Tabet, 2003). Ody (1993) reported that tea has been consumed socially and habitually by people for so long (since 3000 BC) but apart from the stringent taste, its medicinal properties are often over looked. Tea is a source of anti-oxidant nutrients such as carotenoids and ascorbic acids; it makes body to be resistant to bacterial infection; it reduces the incidence of diabetics; it inhibits the growth of cancer cells; it increases body's immunity against viral infection; it is a cardioprotective agent; it protects the brain; it is an anti-inflammatory and antifibrotic; it increases alertness and also speeds up heartbeat and breathing rate thus reduces the incidence of hypotension (Aroyeun, et al, 2013). However, traditional healers have long believed that drinking tea is a means of prolonging life (Chopra and David, 2002). Tea is an important source of caffeine which is a mild stimulant of central nervous system. As a stimulant, it speeds up heartbeat and breathing rate and has implication on hearth and reproduction problems (Thomas, 1991). However, with all these robust benefits of tea, it is quite disheartening that there is an information gap regarding its status of consumption in the study area thus necessitating this study. Hence, the objective of this study were to ascertain the status of tea consumption as

well as the factors that determine the quantity of tea consumed among tea consumers in the study area.

MATERIALS AND METHODS

The study was carried out in Oyo and Ogun States. These two states were randomly selected out of the six states domiciled within the southwestern part of Nigeria. Three Local Government Areas (LGAs) were randomly selected from the two States, these include Oluyole and Ido LGAs in Oyo States and Ijebu North LGA in Ogun State. Random sampling technique was used to select tea consumers from the study area. A total of 120 tea consumers were randomly selected from the three LGAs viz: 48 respondents from Oluyole LGA, 20 respondents from Ido LGA and 52 respondents from Ijebu North LGA. Structured questionnaire was used to elicit information from the randomly selected respondents. The data retrieved from the information collected was analysed with the use of descriptive statistics (such as frequency, percentage, mean, standard deviation) as well as Ordinary Least Square (OLS) multivariate regression analysis. Descriptive statistics was used to analyse the demographic/economic characteristics of tea consumers as well as the status of tea consumption among tea consumers in the study area. The multivariate regression was used to determine the quantity of tea consumed among tea consumers. The model is specified as follows:

$$Q_i = \beta_0 + \beta_i X_i + e_i$$

Where:

Q_i = Vector of endogenous variable (quantity of tea consumed in gramme);

X_i = Vector of exogenous variables (predictors);

β = Regression coefficients;

e_i = Random error term.

The exogenous variables included in the model are:

X_1 = Age of consumer (years);

X_2 = Gender of the consumer (male = 1; female = 2);

X_3 = Educational status (no formal education = 1; primary education = 2, secondary education = 3, tertiary education = 4);

X_4 = Marital status (single = 1, married = 2);

X_5 = Household size (in number);

X_6 = Primary occupation (farming = 1, trading = 2, technical/craftsmanship = 3, civil service/paid job = 4);

X_7 = Monthly income (₦);

X_8 = Association membership (member = 1, non-member = 2);

X_9 = Brand of tea consumed (lipton tea = 1, highland tea = 2, top tea = 3, homecup tea = 4);

X_{10} = Frequency of tea consumption (daily = 1, 3 times/week = 2, 2 times per week = 3, weekly = 4, occasionally = 4);

X_{11} = Price of tea (₦);

X_{12} = Purchasing point (around home = 1, market = 2);

X_{13} = Purpose of tea consumption (because of the taste = 1, because it is good for health = 2, because it is used as a stimulant = 3).

RESULTS AND DISCUSSION

Table 1 showed the demographic/economic characteristics of tea consumers. The table revealed that tea is consumed by all age categories of consumers. However, tea is consumed mostly by the respondents with the age bracket 31-40 years as it represents 29.2% of the total respondents while it is consumed less among the respondents with age more than 50 years as they constituted just 8.3% of the total consumers. This shows that tea is more consumed among youths than the old people in the study area. The low consumption among the old people in the study area might be due to the lack of awareness of the health benefits of tea. The higher proportions (55.0%) of the consumers are males showing that tea is more consumed by males than the females in the study area. As regards the educational level, tea consumption cut across all the educational levels of the respondents. Hence, tea is consumed by all the categories of people whether literates or illiterates. Meanwhile, 65.8% of the respondents had a maximum of secondary school education while just 9.2% had tertiary educational level. Hence, majority of the consumers had low education. This finding is in line with Ekong, (2006) and Aina (2006) that rural areas lack functional educational institutions thus limiting the extent of their educational attainment. This may limit the extent of the transfer of information among the respondents as observed by Kursat (2008) that low level of education of ruralites makes it difficult to share information beyond face to face contact. As regards the household size of the

consumers, the analysis shows that as household size increases, the tendency towards tea consumption decreases. Hence, tea is more consumed among the households with household size four than the

households with household size eight and above where only 20.0% consume tea compared with that of household size four which is 58.3%.

Table 1. Demographic/economic characteristics of tea consumers

Variables	Frequency	Percentage
Age of consumer (years)		
≤ 20	25	20.8
21-30	29	24.2
31-40	35	29.2
41-50	21	17.5
> 50	10	8.3
Total	120	100.0
Gender		
Male	66	55.0
Female	54	45.0
Total	120	100.0
Educational Level		
No formal education	30	25.0
Primary education	34	28.3
Secondary education	45	37.5
Tertiary education	11	9.2
Total	120	100.0
Marital status		
Single	26	21.7
Married	94	78.3
Total	120	100.0
Household size		
≤ 4	70	58.3
5-8	26	21.7
> 8	24	20.0
Total	120	100.0
Primary occupation		
Farming	17	14.2
Trading	66	55.0
Technical/Craftmanship	33	27.5
Civil service/paid job	4	3.3
Total	120	100.0
Association membership		
Member	61	50.8
Non-member	59	49.2
Total	120	100.0

Source: Field survey, 2015.

Table 2. Status of tea consumption among tea consumers

Variables	Frequency	Percentage
Tea consumption		
Consumers of tea	110	91.7
Non-consumers of tea	10	8.3
Total	120	100.0
Brand of tea consumed		
No response	10	8.3
Lipton tea	103	85.8
Highland tea	0	0
Top tea	7	5.9
Home cup tea	0	0
Total	120	100.0
Frequency of tea consumption		
No response	6	5.0
Daily	29	24.2
3 times/week	21	17.5
2 times/week	9	7.5
Weekly	4	3.3
Occasionally	51	42.5
Total	120	100.0
Purpose of consuming tea		
No response	7	5.8
I just like the taste	4	3.3
It is good for my health	87	72.5
I used it as a stimulant	17	14.2
I used it to take bread	5	4.2
Total	120	100.0
Quantity of tea consumed per week (sachets)		
No response	12	10.0
1-3	60	50.0
4-6	12	10.0
7-9	18	15.0
> 9	18	15.0
Total	120	100.0

Source: Field survey, 2015.

Table 3. Determinants of tea consumption among the tea consumers

Variables	Coefficients	p-values
Constant	11.9242	0.026
Age of consumer	-0.1605	0.018**
Gender of the consumer	4.0330	0.016**
Educational status	-0.1444	0.887
Marital status	1.1821	0.602
Household size	3.4417	0.006***
Primary occupation	0.5247	0.653
Monthly income	-0.0022	0.631
Association membership	-2.0454	0.120
Type of tea consumed	-0.2654	0.865
Frequency of tea consumption	3.4914	0.004***
Price of tea	-0.0896	0.443
Purchasing point	2.8766	0.013***
Purpose of tea consumption	-3.4444	0.003***
R-squared	0.6566	
Adj R-squared	0.5663	
Overall p-value	0.0015	

Source: Field survey, 2015.

This might be due to the enlightenment/level of education of the respondents. Literate households where tea is more consumed (as obtained above) usually have smaller household size than the illiterate households. Results of the analysis also revealed that respondents who are member of one association or the other consume more tea than those that are non-member. This is because association membership improves the enlightenment of an individual, hence the former are more enlightened than the later as regards knowing the benefits of tea consumption. Table 2 shows the status of tea consumption in the study area. The table shows that 91.7% of the respondents consume tea showing that tea is widely consumed in the study area. Meanwhile, the brand of tea that is mostly consumed by the consumers is lipton tea. This is because majority (85.8%) of the consumers consumed lipton tea while 5.9% consume top tea. However, it could be observed from table 2 that none of the consumers consume either highland or homecup tea. This shows that these two brands of tea are not so popular in the study area, hence, the producers of the brands would need to organize enlightenment programme in order to popularize the products in the study area. As regards the frequency of tea consumption, most

(42.5%) of the consumers consume tea occasionally while 24.2% consume tea daily. The result shows that the proportion of the consumers that consume tea on daily basis is very low; hence, there is a need to sensitize the consumers in the study area on the need to consume tea on daily basis. This result is in line with Oluyole (2010) which found out that cocoa farming households in Ondo state only consume tea on occasional basis. It could also be observed in table 2 that majority (72.5%) of the consumers submitted that they consume tea because it is good for their health while 14.2% of the consumers claimed that they consume tea as a stimulant. However, a good development from this finding is that it is interesting to note that tea consumers are aware of the health benefits of tea. The finding is buttressed with the finding of Stephanou (2014) who reported that consumers of tea for at least one year or 4 cups of tea per day will not develop high blood pressure. While Costa *et al* (2002) believed that consumption above required cups of tea for heart or major cardio vascular patients as well as pregnant and breast feeding mothers can cause an increase in heart rhythm. Result of the analysis as shown in table 2 revealed that most (50.0%) of the consumers consume between 1 and 3 sachets of tea per week

while 4-6 sachets, 7-9 sachets and above 9 sachets were consumed by 10.0%, 15.0% and 15.0% of the respondents respectively per week. Table 3 shows the factors that determine the quantity of tea consumption in the study area. The table revealed that out of the 13 variables investigated, 6 variables were found to have significantly affected the quantity of tea consumption in the study area. The variables are age of consumer $p < 0.05$, gender of consumer $p < 0.05$, household size $p < 0.01$, frequency of tea consumption $p < 0.01$, purchasing point $p < 0.01$ and purpose of tea consumption $p < 0.01$. Other factors such as educational status, marital status, primary occupation, monthly income, association membership, brand of tea consumed and price of tea do not affect tea consumption significantly.

CONCLUSION

Tea is consumed by all the categories of people in the study area and the brand of tea that is mostly consumed is lipton tea while highland tea is rarely consumed. However, only small proportion of tea consumers consumes tea on daily basis and most tea consumers consume it on health ground. Some of the factors that determine the quantity of tea consumption in the study area are age of consumer, gender of consumer, household size, and frequency of tea consumption, tea purchasing point and the purpose of tea consumption. The study hereby recommends that there is a need for the awareness of the health benefits of tea consumption among the consumers as this will ignite more consumption of tea. The producers of the brands that are rarely consumed in the study area (such as highland or homecup tea) would need to organize enlightenment programme in order to popularize their products. Also, tea consumers should be sensitized on the need to consume tea on daily basis.

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