RESEARCH ARTICLE

Comparative Analysis of Tea and Non-Tea Consumers in South West, Nigeria

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Abstract

African nations that produce tea include Kenya, Malawi, Tanzania, Zimbabwe, South Africa, and Nigeria. Tea drinking is widespread across all demographic groups in Nigeria. Revenue from tea production is US$4.62bn in 2023, and the market is expected to grow yearly by 11.04%. The study did a comparative analysis of tea and non-tea consumers in Southwest Nigeria. The study was carried out in the Southwest geopolitical zone of Nigeria. Two states were selected (Oyo and Osun States). Information was obtained from 252 respondents using a well-structured questionnaire. Descriptive analysis and linear regression analytical techniques were used in this study. The mean age of tea consumers is 40.1 ± 13.8, while the mean age of non-tea consumers is 40.8 ± 15.6. Females consume tea compared to their male counterparts in the Southwest. The mean household size of tea consumers is 4.4 ± 3.6, and for non-tea consumers, it is 3.7 ± 2.0. Fifty-one percent of tea consumers reside in rural areas, and 60% of non-tea consumers reside in rural areas. The brand of tea primarily consumed in the Southwest is Lipton. The variables are significant at different levels: age, educational level, income, price of tea, brand of tea, and tea affordability. Respondents were not consuming tea because of high cost; availability causes harm, low/no knowledge, taste, and no/low budget. It is recommended that the public should be sensitized to the need to consume tea, and companies should produce tea of different tastes and flavors for consumers to choose from.

Keywords: Consumers, Non-consumers, Southwest, Tea.

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INTRODUCTION

Tea is one of the most common and affordable drinks in the world that many people enjoy, with smallholder farmers producing the majority of the world's supply (Oluyole *et al.,* 2015). The tea plant is indigenous to East and South Asia, and it first appeared as a therapeutic beverage in North Burma and Southwest China (Oluyole et al., 2019). Tea helps individuals enhance their nutritional condition in many developing nations, creating useful jobs in rural areas (FAO, 2022). Over 17 billion US dollars worth of tea is produced worldwide each year, and 9.5 billion US dollars worth of tea is traded, making tea an important source of export revenue. Tea production globally is estimated at 6.5 million tons in 2021 compared to 6.3 million tons in 2020. China is the world's largest producer of tea, with production accounting for 47% of the total in 2021. India, ranking second in global tea production, regained its output in 2021, moving from 126 million tons (2020) to 1.33 million tons in 2021 (FAO, 2022).

Tea was first consumed in China, with the first records of tea consumption dating to the 10th century. Portuguese missionaries brought tea to Great Britain in the 16th century, and it was first popularly consumed there in the 18th century (Oluyole *et al.*, 2019). The most popular beverage worldwide is tea. Turkey is the top country in the world for per capita tea consumption, with an estimated 1,300 cups (3.16kg) consumed annually per person. The second-largest tea consumer in the world is Ireland, where the most popular type of tea is loose-leaf black tea, with an average annual consumption rate of 2.19 kg. The United Kingdom, which consumes 1.94 kg of tea per person annually, is the third-highest tea-consuming nation. The Dutch East India company initially imported green tea from China and later from India in late 1650, when Russia placed fourth with a per capita consumption of 1.38 kg of tea. In an effort to establish economic ties with Russia, the Chinese ambassador gave tea to Aleksey Mikhailovich in 1630, which is when tea was first introduced to the country (World Population Review, 2022).

The market is characterized by innovation and premiumization and draws an increasing number of newly rising middle-class consumers. Tea, however, suffers a variety of difficulties. Nevertheless, it is crucial that the industry manages to strike a balance between the necessity for growth and sustainability demands at every point in the value chain (FAO, 2022).

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African nations that produce tea include Kenya, Malawi, Tanzania, Zimbabwe, South Africa, and Nigeria. Tea was later introduced to Africa in Kenya in 1903 (Oluyole *et al.*, 2019). De Bouley from West Cameroon brought tea to Nigeria in 1952 (Adedeji, 2006). Tea drinking is widespread across all demographic groups in Nigeria (Sowunmi *et al.,* 2009). When Nigeria's first commercial tea project, a 450-hectare integrated estate, was designed and established by Bohea Limited, a United Kingdom-based autonomous operating company, on the Mambilla Plateau, the 1st commercialized replicas were brought into Nigeria (Mambilla Plateau). Commercial tea planting began in Nigeria in 1982 when the country produced black tea on 1,200 hectares of land using the Crush Tear Curl (CTC) method, producing an average of 1640 tons annually. Revenue from tea production is US$4.62bn in 2023, and the market is expected to grow yearly by 11.04% (CAGR 2023-2025) (www.statistica.com). However, this amount only met 10% of domestic demand, creating opportunities for additional domestic and international investments in the Nigerian tea industry (Oge, 2017).

In 1959, the Lipton tea business arrived in Nigeria before commercial tea planting. Before any commercial tea plants were established, the Van Den Bergh Foods Company introduced the Lipton tea brand to Nigeria in 1959 using a tea blend imported from Kenya. In 1985, Unilever purchased the company, and Unilever Nigeria was established. As people learned about the benefits of tea and the various ways of tea consumption, Nigeria progressively developed into a nation consuming tea (Oge, 2017). The Northern region of Nigeria, which is predominately Hausa and is considered the country's largest tea consumer, is where Nigerians first began to develop a culture of tea drinking. They frequently include tea in their breakfast, lunch, and supper menus and serve it to visitors. This is because Nigeria's northern area, which is also recognized as the hottest part of the country, is endowed with exceptionally severe weather. States like Lagos in the Southwest have benefited from this culture, which has spread down there. This is especially true during the rainy season. With the addition of the noodle-breakfast corner, they have even improved. Meanwhile, the Southwest region of Nigeria is home to a large population of tea enthusiasts who will drink tea in any condition.

Most families typically enjoy that style of tea consumption for breakfast or dinner together with bread-based munchies. Nigerians now realize the need to reduce their calorie intake. Thus they drink tea with honey. This is due to increased health awareness in the country (Oge, 2017). Due to the growing health benefits of green tea, more and more regions of the world are adopting the practice of drinking tea. Apart from the classic black tea, the availability of many tea blends and flavors has sparked Nigerians' interest in tea.

Objectives

To determine the socio-economic characteristics of tea and non-tea consumers in Southwest Nigeria
To assess the determinants of tea consumption in Southwest Nigeria
To identify the constraints to tea consumption in Southwest Nigeria.

Literature Review

Oluyole *et al*. (2017) analyzed the status of tea consumption in the Southwest region of Nigeria by choosing the states of Oyo and Ogun from the region's Southwest. From the two States, three Local Government Areas (LGAs) and 120 tea consumers were chosen randomly for the study. Descriptive statistics and a multivariate regression model were used to assess the data collected. In the study, most respondents, especially those who belonged to one association or another in the study area, were between the ages of 31 and 40 when they reported drinking tea. Eighty-six percent of the consumers drank Lipton tea. They drank tea because it greatly benefits their health, but others also consume it as a stimulant. Age of consumers, gender of consumers, household size, frequency of consumers, tea purchasing location, and purpose of drinking tea all play a key role in determining the amount of tea consumed in the studied area. The study emphasized the need to sensitize Nigerians to consume tea.

Oluyole *et al*. (2019) examined the comparative analysis of the demand for various tea brands in Southwestern Nigeria. They used a straightforward random sampling technique to choose the states of Ondo and Ekiti from the region. From Ondo and Ekiti States, respectively, two and three Local Government Areas (LGAs) were chosen at random. A total of five communities were used for the study, one from each LGA. A total of 280 respondents were chosen at random from the communities. With the help of a structured questionnaire, information was gathered from the respondents, and descriptive statistics were used to assess the information that was gathered. Thirty-three percent of tea consumers were between 21-30 years while 16% were above fifty years. About 6% of the respondents consumed Highland tea, while 69% consumed Lipton tea. In the study, Lipton brand of tea was widely demanded and thus producers of the brand that had low demand should enlighten people on the benefits of their brand.

In Taraba State, Nigeria, Oladokun and Oluyole (2021) studied the consumption of green tea and the factors that influence it. A multistage sampling technique was used to choose respondents from three distinct villages. A carefully constructed questionnaire was used to obtain information from 128 respondents. Descriptive statistics, composite score analysis, and ordered probit regression techniques were used to analyze the information. The majority of respondents were male farmers with a mean age of 41. The majority of respondents consumed 1 to 7 sachets weekly on average. The low-level category, which includes respondents who consume between 1 and 2 sachets, is made up of 62% of the respondents. Twenty-seven percent of respondents were at the medium/intermediate level, where respondents consume three to ten sachets. Twelve percent of the respondents fall into the high category, including those who drink between 11 and 36 sachets of green tea daily. The predictors of green tea consumption include the respondents' age, sex, and location, all of which enhanced green tea consumption, while respondents' occupation and price of green tea reduced its consumption. The study recommended that the right strategies should be put in place to reduce the price of green tea.

In Southwest Nigerian households' tea consumption was examined by Showumi *et al*., 2021. Data was collected from both rural and urban households using structured questionnaires to extract the required information. In the study majority of respondents who consumed branded tea were men, married people, and older people. While some of them drank other brands of tea, the majority of them drank herbal tea. The majority of survey participants who consumed branded teas were educated. Customers who want branded tea most frequently brew Lipton tea with milk or sugar. Among other brands of tea, Lipton tea is the one with the highest average monthly household expenses. The percentages of total spending on branded teas were, however, generally quite low across all brands in the research area. Furthermore, household spending on extras was greater than that on branded tea, with Lagos State having the largest spending on branded tea. Furthermore, it was discovered that demographics had no impact on how much was spent on branded tea as well as alternatives and complements. Additionally, there is an inverse correlation between branded tea's price and consumption share. The study recommended that the right policies be put in place for firms to source for tea leaves locally to minimize branded tea prices and thus create jobs along the tea value chain.

METHODOLOGY

The study was carried out in the Southwest geopolitical zone of Nigeria. Two states were selected (Oyo and Osun States). In each of the selected States, one urban and one rural local government area (LGAs) were selected thus making a total of four LGAs selected for the study. The LGAs selected were Oyo (Oluyole and Ido) and Osun (Irewole and Ife East). Information was obtained from the respondents using a well structured questionnaire. Two hundred and sixty copies of the questionnaire were distributed. After sorting out for missing data, 252 respondents' information was used for analysis.

Analytical techniques

Descriptive analysis and linear regression analytical techniques were used in this study.

Descriptive analysis: This involves the use of mean, frequencies, and percentages.

Linear Regression Analysis – this was used to determine the factors influencing tea consumption in Southwest Nigeria.

The implicit model is:

$$Y_i = \beta_1 x_l + \beta_2 x_2 + \dots + \beta_n x_n + \varepsilon_i \quad (1)$$

Where

Y= quantity of tea consumed per week

εi= error term

The x_{is} are exogeneous variables, which are: age, gender, marital status, educational level, household size, income, place of residence, number of sachet per week and brand of tea.

RESULTS AND DISCUSSION

Table 1 presents the socio-economic characteristics of tea and non-tea consumers in Southwest Nigeria. Sixty-five percent of tea consumers were between 31-60 years; 54% of non-tea consumers were between 31-60 years. Individuals above 60 years do not consume tea as only 7% of them consume it. People at this age need to consume more tea because of the health benefits. Oge (2017) affirms that older people need to consume tea because of its health benefits. The mean age of tea consumers is 40.1 ± 13.8, while the mean age of non-tea consumers is 40.8 ± 15.6. Females consume tea compared to their male counterparts in Southwest. This has great implications on household consumption because what females consume, other members of the family would probably consume too. Most of the tea consumers and non-tea consumers are married. Marriage has a role to play in tea consumption because couples can influence each other and other members positively/negatively in tea consumption. Eighteen percent of tea consumers are single, while 4% are widowed. Twenty-five percent of non-tea consumers are single, while 7.1% are widowed. Seven percent of tea consumers have no formal education, 28% have primary education, 49% have secondary while 16% have tertiary education. Seven percent of non-tea consumers have no formal education, 32% have primary education, 39% have secondary education, and 21% have tertiary education. Education plays a key role in tea consumption as the highest percentage of tea consumers have secondary education. The majority of tea consumers and non-tea consumers have a household size of between 1 and 5 persons. The mean household size of tea consumers is 4.4 ± 3.6, for non-tea consumers it is 3.7 ± 2.0. Fifty-one percent of tea consumers reside in rural areas and 60% of non tea consumers reside in rural areas. The brand of tea primarily consumed in the Southwest is Lipton.

Table 2 presents the determinants of tea consumption in Southwest Nigeria. The result showed that the regressors can explain 81.5% of the variations in the dependent variables, that is, the coefficient of determination (R^2) was 81.5%. The variables significant at different % levels are age, educational level, income, price of tea, brand of tea, and tea affordability. The coefficient for age was negative and significant at 10%. This implies that as the age of the respondents increases, the consumption of tea reduces. As people advance in age, they see the need not to consume tea. The reverse should be the case as people advance in age. They should consume less of beverages like Milo and bournvita but consume more of tea because of its health benefits. Educational level is positive and significant at 5%. As the educational level of respondents increases, the consumption of tea increases. The more educated the respondents are, the more they get enlightened on the health benefits of tea. Income is positive and significant at 5%. As income increases, tea consumption increases. Respondents have more money to buy tea when their income is increased. The price of tea per sachet is positive and significant at 1%. As the price of tea increases, tea consumption also increases. Respondents who know tea's health benefits will buy it even if the price increases. The brand of tea is positive and significant at 5%. As the brand of tea increases, consumption of tea increases. When there are different brands of tea

Table 1: Socio-economic Characteristics of Tea and non Tea Consumers in South West, Nigeria

Variable	Tea consumers freq.	%	Non Tea Consumer(N = 112) Freq.	%
Age			Freq	%
≤ 30	41	27.6	40	35.7
31-60	95	65.3	60	53.6
>60	10	7.1	12	10.7
Mean	40.1±13.8		40.8 ± 15.6	
Gender				
Male	69	46.9	60	53.6
Female	77	53.1	52	46.4
Marital status				
Single	26	18.4	28	25.0
Married	114	77.6	76	67.9
Widowed	6	4.0	8	7.1
Educational Level				
No formal education	10	7.1	3	7.1
Primary	40	27.6	36	32.1
Secondary	72	48.9	44	39.3
Tertiary	24	16.3	24	21.4
Household size				
1-5	104	71.4	88	78.6
6-10	40	27.6	24	21.4
>10	2	1.0	-	-
Mean	4.4 ± 3.6		3.7 ± 2.0	
Place of residence				
Urban	72	49.0	44	39.3
Rural	74	51.0	68	60.7
Brand of tea				
Lipton	132	90.0	-	-
Top tea	7	5.0	-	-
Others	7	5.0	-	-

Source: Field Survey, 2021

(different flavors and taste) consumers will have different varieties they can pick from. Tea affordability is positive and significant at 1%. The more affordable tea becomes, the more people consume it.

Table 3 presented the reasons people give for not consuming tea. Twenty one percent of the respondents said that the reason they were not consuming tea was because it was expensive. Seven percent said it was not readily available, seven percent said it was harmful, 39% said they do not know much about it, 32% said it does not taste well. Also, 14% said they do not have a budget, while 18% said their household did not welcome tea.

Table 2: Factors influencing the consumption of tea by consumers and non-consumers

Variable	Coefficient	Std. Error	T	p>|t|
Age	-0.0027*	0.0015	-1.67	0.096
Gender	0.0115	0.0304	0.38	0.705
Marital status	0.0475	0.0321	1.47	0.142
Educational level	0.0413**	0.0188	2.20	0.029
Household size	0.0041	0.0045	0.90	0.367
Income	7.15e-07**	2.87 e-07	2.49	0.013
Place of residence	-0.0296	0.0346	-0.86	0.392
Frequency of consumption	0.0030	0.0158	0.19	0.848
Number of sachet per week	0.0018	0.0138	0.13	0.898
Price of tea per sachet	0.0248***	0.0015	16.82	0.000
Brand of tea	0.0629**	0.0279	2.26	0.025
Income spent on tea per week	0.0001	0.0004	0.34	0.737
Tea affordability	0.1298***	0.0480	2.70	0.007
Constant	1.1765***	0.2274	5.17	0.000

Source: Field Survey, 2021 $p<0.01$=1% ***, $p<0.05$=5% **, $p<0.1$=10% *

Table 3: Reasons for not consuming tea

S/N	Reasons	%
1	High cost	21.4
2	Availability	7.1
3	It is harmful	7.1
4	Low knowledge	39.3
5	Taste	32.1
6	No/low budget	14.3
7	Not welcomed by household	17.9

Source: Field Survey, 2021

CONCLUSION AND RECOMMENDATION

The mean age of tea consumers is 40.1±13.8, while the mean age of non-tea consumers is 40.8 ± 15.6. More females consume tea compared to their male counterparts in the Southwest. Most of the tea consumers and non-tea consumers are married. The determinants of tea were age, educational level, income, price of tea, brand of tea, and tea affordability. The reasons for not consuming tea were that it is costly, not readily available, is harmful, and does not taste well. The public should be sensitized to the need to consume tea, and companies should produce tea of different taste and flavors for consumers.

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