

## Conjoint Analysis of Students' Choice of Food Vendor and Menu in the University Community of Akungba Akoko, Nigeria

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### Abstract

*Despite the importance of outdoor food vending as an important agribusiness enterprise that is playing a key role in distributing ready to eat food to consumers, there are still gaps that need to be addressed to ensure the interests of producer and consumers are sustainably catered for. Therefore, this study empirically examined students' choice of joint food vendor and menu in the university community of Akungba Akoko. The study evaluated students' socio-economic characteristics and their perceptions on how the hygienic environment and cleanliness of food products as well as vendors' customer care and relationship at the point of sales affect their choice of vendor. Conjoint analysis was deployed to determine students' preference for combined vendor and menu, and what they could afford to pay for their choice of combination. 120 students of Adekunle Ajasin University, Akungba Akoko across departments and levels were selected using stratified random sampling. The study classified the food vendors into three categories – formal, informal and semi-formal, and found that more than 80% of the students interviewed spent more than 50% of their monthly stipends on ready to eat food bought from the vendors. The study also found that students' monthly stipend (N14805.72 [\$38.76]) was less than their average total monthly academic related expenditure (N38204.22 [\$100.01]). The most preferred menus by students include rice with stew and swallow with egusi at the rate of \$0.79 - \$1.31 per plate in formal and semi-formal food vendors respectively but their capacity to afford only \$0.68 per meal is a limiting factor. The study recommends an effective policy strategy to increase students' stipends with a view to increasing their access to and demand for food.*

**Keyword:** Conjoint Analysis, ready to eat food, Food vendor, Menu, and Students

### 1.0 Introduction

The challenges associated with the dynamics of food demand and how to get quick access to ready to eat (RTE) food particularly in the sub-Saharan Africa (SSA) are of interest to researchers, policymakers and other stakeholders in the food industry. An observable trend in countries across SSA is such that there is consistent rise in the frequency of dining out and the sector of food service provision has reacted accordingly by extending and diversifying its product profile (PwC, 2013). Most people who patronize food vendors do so because of convenience, accessibility and affordability (Bella et al., 2016). Globally, food vending market has grown hugely with over 2.5 billion people patronizing the market regularly (Winarno, 2017). Although the United States dominate the fast food industry in the world with locations in over 100 countries, however, the U.K. is credited with the highest number of fast food per person (Mustapha, Fokokunde and Awolusi, 2014; and Parsa and Kwansa, 2001). The literature attributes the success story to well-organized food service institutions in the developed countries that oversees the operations of the vendors. Even in some developing countries, where unemployment rate is highly pronounced, and the food service institutions

are increasingly being strengthened for effective policy implementations (Herforth, Ahmed, Declerck, Fanzo, and Remans, 2017).

It is evidently clear that food vending as an agribusiness remains a huge source of income to many households (Morano, Barrichello, Jacomossi, and D'Acosta-Rivera, 2018). Similarly, the fast food vending service sub-sector has played appreciable role in reducing unemployment challenges confronting the developing world. According to Basinski (2014), all fingers are not equal, and so those who could not secure white collar jobs have turned to street food vending. Thus, expansion of food vending has played significant role in increasingly generating employment for many rural and urban dwellers (Onodugo, Ezeadichie, Onwuneme and Anosike, 2016). Besides, as many jobs are increasingly becoming time-demanding, food vending in the public space offers quick access to ready to eat food. In India, the sub-sector accounts for about 3% of the total non-farm employment, which translate to more than 3.1 million street traders nationwide (Unni, 2010). In Peru, food vending business constitutes about 9% of the total informal employment, which translate to about 240,000 vendors (Herrera et al., 2011). Skinner (2011) estimated that food vending in Africa cities accounts for about 25% of total employment in the informal sector. Interestingly, the adventure of model inclined entrepreneurs in food vending business has increased commercial activities in the industry. These days, the industry is characterized by pre-formulated food recipe with a view to achieving efficient use of limited resources while ensuring high level of consistence in flavor and quality of products and quick services as expected by customers (Iwarere and Fakokunde, 2011).

### **1.1 Problem, Research Questions and Problem**

However, despite the positive impacts of the activities of the food vendors to the local economy, the weight of its negative effects cannot be waved (Filimonau and Krivcova, 2017; Franklin and Badrie, 2015; Gössling et al. 2011; Katajajuuri et al. 2014; Glanz et al. 2007; and Burton et al. 2006). The significant contribution of the sector to the problem of climate change (Gössling et al. 2011; Katajajuuri et al. 2014), and its accelerated pressure imposed on the public health system (Burton et al. 2006; Glanz et al. 2007) have been well debated in the literature. However, there is increasing evidence to suggest that the series of health related complaints about the unhygienic food product being distributed by vendors (Franklin and Badrie, 2015).

Recent observations in Nigeria have clearly shown that as many food vending enterprises are opening up, some others are shutting down due to low patronage and perhaps inability to compete in the industry. Put in another way, while there is a long queue in some vendors, there are scanty people visiting some other vendors. In fact, the long queue in some food vending shops often affects the time required for customers including students to be optimally productive (Verma et al., 2013). According to Kani (2015), customers' consumption behaviour is known to be influenced by income and change of socio-economic status. This may also influence the choice of vendor and menu.

Sometimes, the insufficiency of the menu list, where some canteens deliberately exclude some local delicacies originated from the location where canteens are cited can discourage some tourism inclined customers from patronizing some vendors. Some of the top rated food canteens are guilty of this. This negates the quest to promote food tourism in Nigeria. Although Morakinyo et al. (2016) posited that this neglect was as a result of the fact that many of the local delicacies (dishes) lack some vital mineral elements. Often time, this mismatch between available food products and consumers' food interest is a source of frequent conflicts between vendors and customers.

Another challenge coming up with food vending business is the class struggle and oppressive tendencies among consumers. This has further deepened the inequality between the rich and

the poor. According to Chung and Myers (1999), consumers of less purchasing power opt to buy ready to eat food from informal food vendor because of the lower price when compared to food sold by formal food vendors. However, the literature documented that some rich, for health reasons, would also prefer taking the local dishes without artificial flavour from any hygienic food vendor.

In the ensuing debate, the students' interests as regards outdoor food vending has not been robustly debated. Students are hyper active set of youth whose interests for menu and prices as well as which vendor to patronise can be entirely different from the general public. Yet, the literature is very scanty on their perceptions of their choice of food vendors and menu. It is in view of this scanty literature, this study empirically examined students' choice of food vendor and menu in the university community of Akungba Akoko. The study evaluated students' socio-economic characteristics and their perceptions on how the hygienic environment and cleanliness of food products as well as vendors' customer care and relationship with customers at the point of sales affect their choice of vendor. Conjoint analysis was also deployed to determine students' preference for combined vendor and menu, and what they could afford to pay for their choice of combination.

## **2.0 Conceptual Framework**

Several studies have found that increased female workforce participation, time pressures brought by jobs (Sen et al., 2019; and Bowers, 2000), individuals from single-households (Caswell et al., 2013; Harris, Shiptsova, 2007; and Byrne, 1998) and lack of cooking skills (Gofton, 1995) motivate consumers to purchase ready to eat foods (Costa et al., 2007). Ready to eat foods can be defined as complete meals that require little efforts and quickly replace with home-made food (Costa et al., 2001; and Mahon et al., 2006). Chung and Myers (1999) harped on purchasing power and the prices of food product as major determinants of consumers' demand for ready to eat food. Bhuyan and Govindasamy (2020) identified authenticity, gender, level of education and gender as major determinants of consumers' choice of ready to take food. Merve, Yanar, and Barry (2020) found that vendors' understanding of consumers' wants will help in consistently providing for their menu of interests.

Food vendor is described as any restaurant, vendor, business, non-profit, organization, entity, group or individual that provides prepared food at a retail level, including a food service (Payne-Palacio and Theis, 2015). Menu can be viewed in different ways including a list of dishes available in food restaurant or a list of prepared food (ready to eat food) available to be served. Sometimes, food listed on the menu profile may not be readily available at the point of request but can be prepared within few minutes when requested. However, in this study, the menu profile is a list of menu expectations which students are willing to buy depending on their choice. The menu list was generated by asking students to list of vendor and food menu they highly preferred under each of the following headings: category of vendor, food, soup, frequency of demand and price they would be willing to pay. This approach was hinged on the premises that students' choice of ready to eat food depends on many factors (Petrescu, Vermeir, and Petrescu-Mag, 2020; and Bhuyan and Govindasamy 2020) including those listed above.

There are arrays of food vending process identified in the literature, however, for clarity, this study focused on those that fit into formal, semi-formal and informal food vendors. The classification of ready to eat food vendors into these three categories was done by modifying the construct created by Abiuro, Gyan, and Akanbang (2019) on food vendors.

**Table 1: Distinctive Features of Formal, Semi-Formal and Informal Food Canteens**

Characteristics	Formal Food Canteen	Semi-Formal Food Canteen	Informal Food Canteen
Taste	The food contains artificial spices	Both artificial spices and natural flavor are combined.	The food has natural flavor
Environmental Sanitation	The environment is free from rubbish and flies, hand washing facilities are available and drains are sealed	The environment is not totally free from rubbish and flies but hand washing facilities are available but drains are not sealed	The environment has rubbish heaps and flies, no hand washing facilities but without drains
Hygiene of service providers	Service providers have uniforms, short and clean nails, clean clothing, head gear, apron. Very clean indoor toilet facility (water running)	Service providers have long and unkempt nails, have uniform and wear head gear but no apron  Open or detached toilet facility (No water)	Service providers have long and unkempt nails, have no uniform, wear no head gear and apron. No toilet facility
Customers relation of service providers	Service providers have formal education and so, they have good communication skills. It is an offence to frown or get angry at customers.	Service providers may not be highly educated but have fairly good communication skills. They may frown and get angry at customers without any consequence.	Service providers are illiterate have poor communication skills, frowns and easily gets angry at customers
Presence in terms of number	Currently, it is about 1 per a community with a population of about 100,000 - 150,000 but it's usually rare in rural areas except a university community	May not be more than 30 in a town of 100,000 - 150,000 people.	More than 50 in a town of 100,000 - 150,000 people.
Online presence	Yes	No	No
Registered Brand Name	Yes	No	No

**Source:** Author's adaptation, 2021.

There is sufficient evidence that consumer's decision on the choice of vendor or menu is primarily on the quality of food types or menus that are available (Petrescu, Vermeir, and Petrescu-Mag, 2020; and Molnar, 1995). The perceived quality describes "the consumer's judgment about a product's overall excellence or superiority" (Zeithaml, 1988). The attributes of food as used by consumers to describe its quality reflect consumers' interests, concerns, needs, or knowledge (Petrescu, Vermeir, and Petrescu-Mag, 2020). The awareness on hygiene and highly nutritional food has also gained prominence in scholarly debate (Han, Ruiz-Garcia, Qian, Yang, 2018; Caswell and Mojduszka, 1996; and Hooker and Caswell, 1996). It is certainly difficult to narrow the factors influencing consumers' choice of vendor only to specific food quality attributes, instead, a combination of attributes and the context of

satisfaction derivable are known to be useful in explaining consumers' preferences (Petrescu, Vermeir, and Petrescu-Mag, 2020).

### 3.0 Methodology

#### 3.1 Study Area

The study area for this study is Akungba Akoko, a university community in Ondo State, Nigeria. Akungba is a community alongside other seven communities (Ikun, Oba, Oka, Ayegunle, Supare, etioro iwaro) in Akoko South West Local Government area of Ondo State. Akungba is one of the fast developing communities in Ondo State owing to the presence of Adekunle Ajasin University in the community. Its geographical coordinates are 7° 28' 0" North, 5° 44' 0" East.



**Map of Akungba Community**

A multi-stage stratified random sampling technique was used to select the target respondents for this study. The student population was first stratified based on the existing faculties of the Adekunle Ajasin University, Akungba-Akoko (AAUA). Each of the strata was further stratified based on departments and study levels (classes). The distribution of the sample size among the various strata was proportional to the number of students. A simple random sampling technique was used to select the required students from each class. A total of 120 students were randomly selected. The well-structured questionnaires were self-administered through a survey in January, 2021. The introductory session of the survey questionnaire contained questions on the socio-economic characteristics of the respondents. The main pre-set section for conjoint had an introduction and the choice sets. The questionnaire was initially pre-tested before the data collection. Only minor changes were made to the context-specific description of the attribute levels within the choice sets after the pre-test. Descriptive analysis: Likert scales were used to examine consumers' perceptions that influence their patronage and choice of fast food vendor in the study area of which factors such as cleanliness, well prepared food, environments, clean tables, great food taste, availability of fresh foods, value for money, low fat, variety menu, spacious internal area as well as affordable food; 5 point scales such as: 1= Strongly disagree [SD], 2= Disagree [D], 3= Undecided [U], 4 = Agree [A], 5 = Strongly agree. [SA]. Similarly, a conjoint analytical technique as deployed by Shtudiner, Zwilling and Kantor (2017) was also used to analyze the data obtained.

### **Conjoint Analytical Technique (CAT)**

The CAT is a quantitative method that has been widely used particularly in marketing research for its capacity to efficiently measure consumers' preference for combined product attributes. Other uses of CAT include the ease with which it helps to understand how price changes influence the demand for products or services, and to forecast the likely acceptance of a product if brought to the market (Popovic et al., 2018; and McCullough, 2002). Adopting CAT in this study helped in avoiding the clumsiness of having to survey all the respondents on the combination of menu attributes they preferred. CAT allowed evaluation of consumers' preference to be based on existing and potential menu profiles (Rao, 2008). Each profile includes a multiple of conjoined menu attributes. Therefore, students completed 28 conjoint questions. These questions were carefully designed using experimental design principles. CAT, which permitted an independent variation of the menu attributes to be shown to the respondents as responses to the menu profiles were observed, allowed statistically significant deduction to be made on which menu attributes have the most impact on choice. Expectedly, the preference derived from here are derived from relatively realistic tradeoff situations. For each menu attribute included in this study, a part-worth utility is generated expressing the preference score of each in relation to other attributes. In other words, it makes the consumers' preference for each attribute in a defined competitive context explicit thus, allowing canteen managers, as in the case in this study, to know a variety of what-if scenarios related to the existing or known menu attributes.

## **3.0 Results and Discussion**

### **3.1 Socio-economics Characteristics of Respondents**

Table 2 reveals the socio-economic characteristics of respondents. The Table shows that the average age of respondents is 23 years while the standard deviation (SD) from this mean is 2.60. It indicates that the age distribution of respondents fairly clusters around 23 years. The study also found that respondents spent a monthly average of about N7825.08 (\$0.68/day) on buying food from canteens in the university community (SD = 3855.54). Transportation around the university community costed respondents about N6654.46 monthly (SD=3768.27). On primary health care, the respondents spent close to N3821.88 per month (SD=2050.70). Very striking finding in this study is the fact that across all the class levels, average monthly expenditure (N38204.22) is greater than average monthly stipends (N14805.72) received from parents.

**Table 2: Socio-economic Characteristics of Respondents**

		N = 120	Mean	Standard Dev
Age of respondents	400 Level	30	26.32	2.12
	300 Level	30	25.29	2.54
	200 Level	30	23.55	2.94
	100 Level	30	19.24	2.78
Monthly Expenditure on food in Canteen	400 Level	30	8316.42	4157.45
	300 Level	30	7906.67	3232.74
	200 Level	30	6986.67	3472.65
	100 Level	30	8073.36	4559.32
Expenditure on transportation within University Community	400 Level	30	5571.11	3590.24
	300 Level	30	6032.37	3974.81
	200 Level	30	6517.06	3120.27
	100 Level	30	8634.23	4390.40
Monthly expenditure on primary health care	400 Level	30	2095.45	1293.16
	300 Level	30	3792.88	2809.63
	200 Level	30	4527.81	3809.22
	100 Level	30	4871.43	2117.82
Monthly stipends	400 Level	30	17031.11	8043.46
	300 Level	30	15759.07	5110.22
	200 Level	30	14156.59	3930.81
	100 Level	30	12640.44	6820.44
Monthly Expenditure	400 Level	30	36740.44	17330.33
	300 Level	30	34922.26	14213.73
	200 Level	30	32051.52	11623.12
	100 Level	30	27582.67	15916.16

In a system that hardly provide economic intervention for indigent and poor students, how the students are surviving the huge stipend deficit remains a puzzle that needs to be unraveled. However, the study notes the coincidence between the period when students are studying with huge deficit in their monthly stipends yet they cope with high monthly expenditure and the period when there is high rate of internet fraud and other economic related vices particularly among undergraduate students and youths.

### **3.2 Distribution of Respondents by the Category of Food Vendor They Frequently Patronized**

Table 3 reveals the distribution of students by the category of food vendor they frequently patronized. The Table reveals there are 54 and 66 male and female students in the sample. Although in each of the three categories of food vendors, more female students patronized food vendors than the boys, however, the average expenditure on ready to eat food from the food vendors by the male students is significantly greater than those of their female counterparts. Similarly, evidence from the cross tabulation between the income distribution and mean expenditure shows that the mean expenditure incurred on RTE food from vendors by male students were significantly higher than the female students across income groups. The study found that, among other monthly stipend groups, those whose monthly stipend was above N25000.00 incurred the highest expenses to buy food from formal vendor. Whereas

those within the monthly stipend bracket of N20001.00 - N25000.00 were the highest spenders among other income groups buying food from the semi-formal vendors. Among the monthly stipend groups buying from informal food vendors, those within the bracket of N10001.00 - N15000.00 significantly spent higher than others. As shown on the Table, there is evidence of statistically significant difference in the values of the mean expenditure in the age groups across the three categories of food vendors. Therefore, in the formal food vendor category, the average expenditure by those in the 31 – 35 age bracket is the highest while in the semi-formal and informal vendors, those within the 26 – 30 and 21 – 25 age brackets have the highest average expenditure respectively.

**Table 3: Distribution of Respondents by the Category of Food Vendor They Frequently Patronized**

	Formal (N=21)		Semi-formal (N=67)		Informal (N=32)	
	% in sub-total	Mean Expenditure	% in sub-total	Mean Expenditure	% in sub-total	Mean Expenditure
Male (54)	42.86	20614.15	47.76	5797.88	40.63	14269.58
Female (66)	57.14	10608.68	52.24	3637.18	59.38	6699.66
Total	100		100		100	
P Value (T-test)		0.002		0.042		0.008
Monthly Stipends						
<= 5000.00 (19)	4.76	3591.27	4.48	2439.14	46.88	4287.76
5001.00 - 10000.00 (24)	4.76	4980.74	20.90	3783.39	28.13	6985.84
10001.00 - 15000.00 (19)	14.29	13386.83	17.91	6859.89	12.50	10571.66
20001.00 - 25000.00 (21)	33.33	14201.12	19.40	8884.84	3.13	5376.58
> 25001.00 (37)	42.86	28116.78	37.31	6540.17	9.38	9071.58
Total	100		100		100	
P value (MANOVA)		0.006		0.010		0.016
Age						
16 – 20	33.33	7834.465	28.36	6567.626	25.00	5770.5
21 – 25	42.86	17207.55	52.24	3722.436	37.50	9352.712
26 – 30	19.05	18756.54	14.93	13638.33	25.00	4441.021
31 – 35	4.76	28093.24	4.48	10688.3	12.50	3908.194
Total	100		100		100	
P value (MANOVA)		0.048		0.000		0.009

**Source:** Field Study, 2021.

The implications of the findings on Table 2 include, one, male students spent more than the female students on ready to take food. This is not unconnected to the fact that male youths eat more than the female, who are known to be consistently watching their weights (Askovic and Kirchengast, 2012). The female students are also not regular callers in food canteens because



of the likelihood that they might not get their choice of food variety so, often time, they would prefer to cook their own food personally and visit canteen for ready to take food once in a while. Findings also revealed that those on higher monthly stipends spent more in formal food canteen and semi-formal food canteen while those who got low monthly stipends from their sponsors patronized informal canteens. This position aligns with the finding of Chung and Myers (1999). In all the five stipend groups, many students spent at least 50% of their stipends on food with little left to take care of other important academic related expenditure. It implies that income/stipend is a likely determinant of student's choice of vendor's category to buy ready to eat food. Similarly, the study found that the students' expenditure on ready to eat food in formal and semi-formal canteens increased as their age increased. However, the reverse was the case in informal food vendor category.

### 3.3 Students' Perception of Attributes Influencing their Preference for RTE food and Food Vendor

Table 4 shows consumers' perceptions of attributes influencing their preference for RTE food and food vendor. It is an evaluation based on students' perceptions of preference for ready to take food instead of cooking by themselves, cleanliness and organization at the point of sales, hygiene and training of those who serve the public (service) and healthiness of the products. The Table reveals that more than 82% of the respondents accepted that they preferred ready to eat food to personally preparing food by themselves. To for each of the question items raised, the strength of agreement is more than 50%. Respondents showed very strong agreement to "the need to socialize", "pressure of academic work" and "lack of cooking skills" as the reasons for their preference for ready to eat food. However, respondents disagreed with the opinion that "insecurity in raw food market is a reason they preferred ready to eat food. On respondents' perceptions of vendors' cleanliness, hygienic food products and responsiveness of vendors to customers, the Table shows that there is positive and a high level of agreement (near consensus) to all the question items posed. This suggests that respondents were consciously aware of the importance of clean environment. hygienic food products and the expectations of good relationship from their food vendors.

**Table 4: Students' Perception of Attributes Influencing their Preference for RTE and Food Vendor**

S/N	Label	strongly agree	agree	Undecided	disagree	strongly disagree
1	Your preference for ready to take food is more than preparing food by yourself	48%	34%	6%	8%	4%
	Your preference for ready to take food is due to the following:					
2	Pressure of (academic) work	22%	52%	3%	15%	8%
3	Lack of cooking skills	27%	44%	15%	9%	5%
4	Difficulty in sourcing for ingredients	14%	36%	11%	22%	17%
5	Insecurity in (raw) food market	11%	23%	21%	32%	13%
6	The need to socialize	56%	34%	3%	5%	2%
7	The workers at the vendors you patronize are clean.	40%	47%	3%	6%	4%
8	You patronize the fast food vendor because of their well prepared food.	34%	42%	10%	12%	2%

9	You patronize the fast food vendors because of their environment.	37%	40%	4%	14%	5%
10	You patronize the fast food vendors because of their clean tables.	36%	38%	6%	17%	3%
11	You patronize the fast food vendors because their great food taste.	39%	35%	10%	14%	2%
12	You patronize fast food vendors that serve fresh foods.	39%	33%	8%	18%	2%
13	You patronize fast food vendors that serve quality food.	41%	32%	12%	13%	2%
14	You patronize fast food vendors that serve food with low fat.	20%	40%	18%	20%	2%
15	You patronize fast food vendors with variety menus.	30%	45%	9%	12%	4%
16	You patronize fast food vendors with comfortable seats.	31%	36%	10%	20%	3%
17	You patronize fast food vendors because of its spacious internal area.	19%	40%	17%	19%	5%
18	You patronize fast food vendors with friendly and courteous employees.	29%	42%	13%	14%	2%
19	Fast food vendors with serene environments serve healthy food.	33%	45%	8%	9%	5%
20	You patronize fast food vendors that are available at late hours of the day.	23%	38%	21%	13%	5%
21	You patronize fast food vendors that are available at the early hours of the day.	14%	48%	21%	14%	3%
22	You patronize fast food vendors that sell affordable food.	35%	38%	10%	14%	3%
23	You patronize fast food vendors because of their value for money.	24%	27%	15%	19%	15%

Source: field survey 2021

### Output of Conjoint Analysis on Students' Preference for Category of Vendor, Menu, Frequency of Demand and Price

Table 5 shows the output of conjoint analysis on students' preference on combination of category of vendor, menu, frequency of demand and price. The Table reveals that the most preferred food is rice and it is preferred to be taken at a formal category of ready to eat food vendor, the preferred soup is stew and the respondents prefer it as lunch every day as long as the price per plate is within ₦300 - ₦500 (\$0.79 – \$1.31). This combination has a utility of 2.725. Although the current price of this menu goes for a minimum of ₦1000 depending on the type of stew a customer wants. Visiting formal food canteens is a way to show class. To many customers who patronize well-branded food restaurants, they often get more than food. Such a place offers customers good background to take both motion and still pictures shows class, and even meet new friends of higher status. As shown in Table 4, the students showed strong agreement to the opinion that the need to socialize is the reason they patronize well-branded formal food restaurants to buy ready to eat food. This is in line with the findings of Benson (2020) who opined that on consistent basis, the formal canteens develop a feedback mechanism to know how best they can meet their customers' satisfaction. In the university

community of Akungba, only one formal food canteen is located there, and it enjoys higher rate (number per vendor outlet) of patronage than other categories of food vendors.

From the table, in semi-formal food category, the most preferred menu by students is swallow with egusi soup at lunch time every day, and they are willing to pay between a price range of ₦300 - ₦500 (\$0.79 – \$1.31) for a plate. The current price for this menu is not fixed for semi-formal food vendors but it goes between N200 – N700 (\$0.52 – \$1.83) depending on the type of swallow or number of wraps of swallow or fish/meat you want. This combination has a utility of 2.214. The flexibility in this category makes it more convenient for customers to moderate the cost of the food menu they want. The services of some canteens in this category is similar to those of the formal category except the scale and size of operations. The ambience is usually not as cozy as that of the formal canteens.

Similarly, in the informal food vendor category, the most preferred food menu is rice with stew taken as lunch every day for a price less than ₦300 (\$0.79). Although there is no fixed price for menu sold in informal canteens. The combination has utility of 1.901.

According to the Table, 8 of the menus (the asterisked) are not popular menu and so, they are not usually served except on special request by customers hence, they are not popular menus. Surprisingly, two of the menus, rice with draw soup as dinner every day at less than ₦500 in formal food vendor and beans with draw soup as breakfast every day in semi-formal food vendor got negative utility, -0.378 and -0.937 respectively as a mark of dissatisfaction or dislike by the respondents.

**Table 5: Output of Conjoint Analysis on Students' Preference for Category of Vendor, Menu, Frequency of Demand and Price**

Category	Food	Soup	Meal	Frequency	Price	Menu Utility
Formal	Rice	Stew	Lunch	Everyday	N300 - N500	2.725
Semi-Formal	Swallow	Egusi	Lunch	Everyday	N300 - N500	2.214
Semi-Formal	Rice	Stew	Breakfast	At most thrice a week	N300 - N500	2.103
Informal	Rice	Stew	Lunch	Everyday	<N300	1.901
Informal	Beans	Stew	Breakfast	Everyday	<N300	1.722
Semi-Formal	Pap	Stew	Lunch	Everyday	N300 - N500	1.642
Formal	Pap	Stew	Lunch	Only on invitation	>N500	1.605
Semi-Formal	Pap	Egusi	Dinner	Everyday	N300 - N500	1.595
Formal	Swallow	Efo riro	Breakfast	Everyday	N300 - N500	1.328
Semi-Formal	Rice	Egusi	Breakfast	At most thrice a week	>N500	1.307
Informal	Pap	Efo riro	Dinner	At most thrice a week	N300 - N500	1.294
Semi-Formal	Swallow	Stew	Dinner	At most once a week	<N300	1.270
Formal	Pap	Stew	Dinner	Only on invitation	>N500	1.238
Formal	Swallow	Draw	Lunch	At most thrice a	<N300	1.208

				week		
Informal	Swallow	Efo riro	Breakfast	Only on invitation	>N500	0.987
Formal	Pap	Egusi	Breakfast	At most once a week	<N300	0.927
Semi-Formal	Pap	Draw	Breakfast	Only on invitation	<N300	0.924
*Semi-Formal	Beans	Efo riro	Breakfast	At most thrice a week	>N500	0.898
*Informal	Rice	Efo riro	Lunch	At most once a week	N300 - N500	0.691
*Semi-Formal	Rice	Efo riro	Dinner	Everyday	<N300	0.663
*Formal	Rice	Efo riro	Breakfast	At most once a week	N300 - N500	0.643
*Formal	Rice	Efo riro	Breakfast	Everyday	<N300	0.558
*Semi-Formal	Rice	Efo riro	Lunch	Only on invitation	<N300	0.551
*Semi-Formal	Beans	Efo riro	Lunch	At most once a week	>N500	0.331
*Formal	Beans	Egusi	Dinner	Only on invitation	N300 - N500	0.276
*Formal	Beans	Efo riro	Lunch	At most thrice a week	<N300	0.173
Formal	Rice	Draw	Dinner	Everyday	>N500	-0.378
Semi-Formal	Beans	Draw	Breakfast	Everyday	N300 - N500	-0.937

**Source:** field survey 2019. \*Odd menu profile not being served except on demand.

Findings from this study have shown that rice and swallow are the most preferred food for the launch by students who patronize ready to eat food vendors in the study area. The inviting flavor of rice, affordability, its lightness in the body as well as the prestige associated its public consumption would have endeared it to students. Ji and Wood (2007) argued that repetitive consumption behaviour has led many to develop consumption habits e.g for consuming rice. On the other hand, preference for swallow is also high because Africans have consciously attached some importance to consumption of swallow to energy supplement. In view of the hectic nature of academic work, which involved walking around to attend classes in different locations and other forms of stress, associated with survival strategies, students are bent on taking food perceived as having high calorie.

#### 4.0 Conclusion and Recommendation

This study assessed students' choice for food vendor and menu in the University Community of Akungba-Akoko. The study was conceptualized in view of the significance of food vending business in Nigeria context as a social integration link particularly by displaying and advancing the local food culture. Besides, the findings from the study can chart a new pathway for the discovery of students' preference on the old menu profile and also preference for new menu that are expected to be included in the menu list of the food vendors in the catchment areas. The study found that respondents, whose average age is 23 years, spent a monthly average of about N7825.08 (\$0.68/day) on buying food from food vendors in and

around the university community ( $SD = 3855.54$ ). Findings revealed that about 56% of students patronize semi-informal food vendors than any other category of food vendor. The study also found that the male students, despite that they are fewer than the female students in the sample, spent significantly more on buying food from the three categories of food vendors. The results of MANOVA indicated that values of mean expenditure across the monthly stipend groups are significantly different for each of the three categories of food vendors. Those with higher monthly stipends spent higher amount to buy ready to eat food per month from formal and informal food vendors than their other counterparts in the lower stipend groups. In addition to these, the study realized that the strength of agreement with cleanliness, hygienic environment of the food vendors and good customer care relationship especially at the dispensing phase is high (more than 50%), though there is still room for tremendous improvement. The study concludes that rice and swallow taken as lunch in formal and semi-formal food vendors respectively are still the most preferred on the menu profile. In all the five stipend groups, many students spent at least 50% of their stipends on food with little left to take care of other expenditure. The revelation that a student whose capacity was able to buy daily food at an average of \$0.68 per day due to limited stipend yet his/her preference for a modest meal costs as much as \$0.79 - \$1.31 is heart wrenching. In view of these, the study suggests an effective policy strategy geared towards ensuring university students work and earn little income to augment the deficit in their monthly stipends. Consequently, in a country where food demand is higher than supply, a functional University Based Farm and Food Production Unit can help in recruiting students to work on temporary basis to raise income, and also increase food availability and affordability in the university community and its environs.

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