BIBLIOGRAPHY

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ABSTRACT

This study was conducted to determine the consumer behavior towards Arabica Coffee, to interpret the factors and considerations affecting consumers in buying the product.

Two methods were employed to gather the information needed in the study: survey questionnaire to determine the awareness of the consumers, product testing through sensory evaluation. There were ninety respondents who evaluated the product which are classified as to professional, non-professional, and students.

Findings showed that the respondents had preferences to Arabica over Barako coffee and generally liked and accepted. Factors that affect the acceptability of the product includes: aroma, taste, color and appearance. Comments and suggestions were solicited to improve the processing of coffee, packaging and marketing.

Arabica coffee is acceptable to the target consumers, however, there is still improvement that should be done and packaging should be improved to make it attractive to consumers.

RESULTS AND DISCUSSIONS

Brief Description of the Respondents

Professionals are the respondents who finished college and vocational courses and those that are employed either in government institutions or private sector, non-professionals are those who didn't finish any college/vocational course except for the five respondents under the non-professional who have finished vocational course but are currently unemployed or they are just staying at home and students are those respondents who are still attending school mostly are in college level.

Types of Coffee Consumed

Table 1 present the type of coffee consumed by the taste panels/respondents. Greater proportions of the respondents: professionals (43.3%), non-professionals (53.3%) and student's (40%) are consuming brewed coffee, while the rest are consuming either instant coffee or both.

Kind of Brewed Coffee Consumed

Arabica is the most important variety among all the coffee varieties that are grown here in the Cordillera, it accounts for 72 percent of the world production. It is an early bearer that is, two years after transplanting, it will already produce berries. Arabica is an ancient coffee variety which has excellent aroma and liquor taste. Arabica contains less caffeine than any other commercially cultivated species of coffee. Liberica commonly known as "Kapeng Barako" produces the biggest berry. It is noted for its very strong taste and color. This variety is drought-resistant and bears four to five years after planting. Robusta is the second most important commercially, accounting of worldwide production. The tree is more widely adaptable than Arabica, but does best in warm equatorial climates (http://vtc.wikidot.com/planting). Table 1 shows the kind of coffee consumed by the respondents. Majority of the professional respondents (66.7%), students (63.6%), and non-professionals (50%) consume Arabica Coffee, and the rest however consume either the instant, Barako or Kalinga coffee.

Form of Brewed Coffee Usually Consumed

Table 1 further shows the form of brewed coffee the respondents usually buy. Majority of the professionals (70%), non professionals (73.3%), and students (60%) buy ground coffee while 6.7% of the students buy the instant form.

Table 1. Types, kinds and form of brewed coffee consumed

TYPES, KIND AND FORM OF BREWED COFFEE	CLASIFICATION OF PANELISTS					
	PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
	F	%	F	%	F	%
Type/Kind of Coffee						
Instant Coffee	9	30.0	8	26.7	10	33.3
Brewed Coffee	13	43.3	16	53.3	12	40.0
Both	8	26.7	6	20.0	8	26.7
Arabica Coffee	16	66.7	13	50.0	14	63.6
Barako Coffee	6	25.0	9	34.6	8	36.4
Kalinga Coffee	2	8.30	4	33.3	-	-
Form of Coffee						
Grounded	21	70.0	22	73.3	18	60.0
Ungrounded	-	-	-	-	-	-
Instant	-	-	-	-	2	6.7

*multiple response

Factors Influencing to Consume
Arabica Coffee

Table 2 shows the factors that influence the respondents to consume Arabica Coffee. Greater proportions of all the respondents: professionals (36.4%), non-professionals (52.9%) and students (62.5%) consume Arabica coffee due to the influences of the family members. Other factors like perception, curiosity, health benefits, presentation of the product, and availability of the products have lesser influences among the respondents. This means that Arabica coffee is mostly preferred by the family members.

Table 2. Factors influencing to consume Arabica coffee

FACTORS	**CLASSIFICATION OF PANELISTS**					
	PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
	F	%	F	%	F	%
Availability of the product in the market	2	9.1	1	5.9	4	25.0
Curiosity on the product	3	13.6	1	5.9	-	-
Health benefits of the product	4	18.2	2	11.8	2	12.5
Perception of the product	1	4.5	2	11.8	-	-
Preferred by the family	8	36.4	9	52.9	10	62.5
Presentation of the product	1	4.5	-	-	-	-
Suggested by friends, etc	3	13.6	2	11.8	-	-

*multiple response

Factors Influencing Not to Consume Arabica Coffee

Table 3 shows the factors that influence the respondents not to consume Arabica coffee. Greater proportions (26.3%) of the professional respondents do not consume Arabica coffee due to dislike in taste, while the non-professional (30.4%) claimed that they do not want to change their kind of coffee they are consume. The students (35.3%) answered that they are not interested to consume the product. The other factors stated below show lesser influence for not consuming Arabica coffee. The result implies that the three groups of respondents have different reasons for not consuming Arabica. Professionals dislike the taste; non-professionals do not want to change the kind of coffee they consume; and the students are not interested.

Table 3. Factors influencing not to consume Arabica coffee

FACTORS	CLASIFICATION OF PANELISTS					
	PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
	F	%	F	%	F	%
Don't want to change kind of coffee being consumed	4	21.1	7	30.4	3	17.6
Bad perception about Arabica	1	5.3	2	11.8	-	-
Dislike the taste	5	26.3	6	26.1	2	11.8
Lack of information	1	5.3	1	4.3	-	-
Never seen any advantage in consuming the product	4	21.1	2	8.7	-	-
Never seen/heard yet	-	-	-	-	5	29.4
Not interested	-	-	-	-	6	35.3
Too expensive	1	5.3	2	8.7	-	-
Unavailability of Arabica coffee in the market	3	15.8	3	13.0	1	5.9

*multiple response

Effect of Coffee Consumption to
the Age and Body Weight

Table 4 shows the perceived effect of coffee consumption on their age and body weight. Age and life-cycle have potential impact on the consumer buying behavior. It is obvious that the consumers change the purchase of goods and services with the passage of time. Family life-cycle consists of different stages such as young singles, married couples, and unmarried couples etc. which help marketers to develop appropriate products for each stage (Brown, 2006). Majority of the respondents: professionals (70%), non-professionals (63.3%) and students (80%) stated that coffee consumption have never recognized possible effect to their age behavior. As for the body weight, most of all the respondents stated that coffee consumption has no effect on their body weight.

Table 4. Effect of coffee consumption to the age and body weight

EFFECT	**CLASSIFICATION OF PANELISTS**					
	PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
	F	%	F	%	F	%
Age						
Have Effect	9	30	11	36.7	6	20
No Effect	21	70	19	63.3	24	80
Body weight						
Have Effect	6	20	6	20.0	3	10
No Effect	24	80	24	80.0	27	90

Perception Towards Arabica Coffee

Table 5 shows what the respondents perceived about Arabica coffee. Majority of the professionals (56%) agreed that Arabica coffee is just like other coffee while 40%

disagreed as similar to other coffee; 40% agreed that it is a special kind of coffee while 56.7% disagreed; and least number of the respondents had no idea at all about the this kind of coffee. For the non-professionals, 46.7% agreed that Arabica is just like other coffees while 36.7% disagreed; 36.7% agreed that Arabica is special kind of coffee while 46.7 had disagreed and 13.3% has no idea at all about the product. Among the students, a similar observation holds true that Arabica is just like other coffees; and special kind of coffee. The result implies similarities in perceptions towards Arabica coffee.

Demographic Profile of the Respondents/Panels

Table 6 presents the general profile of the respondents according to sex, age, religious affiliation, educational attainment, and occupation.

Gender. Among the different groups of respondents, majority of them were female with lesser proportion to male. The professionals and non-professionals had more or less had similar proportion in gender distribution whereas among the students had the most female number.

Table 5. Perception towards Arabica coffee

PARTICULARS	CLASIFICATION OF PANELISTS											
	PROFESSIONALS				NON-PROFESSIONALS				STUDENTS			
	AGREE		DIS-AGREE		AGREE		DIS-AGREE		AGREE		DIS-AGREE	
	F	%	F	%	F	%	F	%	F	%	F	%
It's just like other coffees	17	56.0	12	40.0	14	46.7	11	36.7	15	50.0	11	36.7
Special kind of coffee	12	40.0	17	56.7	11	36.7	14	46.7	11	36.7	15	50.0
No idea at all about the product	1	3.3	-	-	4	13.3	-	-	4	13.3	-	-

Age. Greater proportion of the professionals 36.7% and non-professionals (40%) belonged to age range from 36-45, while all the students had ages from 15-22 years old. The result showed that both the professionals and non-professionals were in middle ages.

Religious affiliation. The religious affiliation showed that Roman Catholics were the dominant religion of all the respondents, followed by Anglican and Baptist and the least to other religious denomination.

Educational attainment. All the respondents attended formal education. Most the professionals (83.3%) were degree holder and 16.7% attained vocational course. For non-professionals, greater proportion either graduated or in high school level and the least were in the elementary level. The students on the other hand were all in the college level. The result implies that the respondents were more or less literate.

Household size. Majority of the professional (53.3%) have small family size with 0-5 members while 46.7% have bigger household size of 6-10 family members. Greater proportions of the non-professionals (50%) and students (60%) had larger household size at 6-10 family members, the rest with five or less.

Numbers of years living in the area. Greater proportions of all the respondents lived or reside in the area. The professionals (43.3%), non-professionals (66.7%) and students (40%) were living in the area for over ten years, and the others for less than ten years.

Table 6. Demographic profile of the respondents/panels

CHARACTERISTICS		PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
		CLASIFICATION OF PANELISTS					
		F	%	F	%	F	%
Gender							
	Female	17	56.7	16	53.3	24	80
	Male	13	43.3	14	46.7	6	20
Total		30	100.0	30	100.0	30	100
Age	15-22	-	-	4	13.3	30	100
	26-35	8	26.7	6	20.0	-	-
	36-45	11	36.7	12	40.0	-	-
	46-55	6	20.0	5	16.7	-	-
	56-75	5	16.7	3	10.0	-	-
Total		30	100.0	30	100.0	30	100
Religious affiliation	Anglican	7	23.3	3	10.0	2	6.7
	Baptist	7	23.3	2	6.7		
	Born Again	-	-	1	3.3	2	6.7
	Jehovah's Witnesses	2	6.7	2	6.7	-	-
	Lutheran	2	6.7			2	6.7
	Roman Catholic	10	33.3	20	66.7	16	53.3
	Pentecost	-	-	2	6.7	4	13.3
	Others	2	6.7	-	-	4	13.3
Total		30	100.0	30	100.0	30	100.0
Highest Educational Attainment	Elementary level	-	-	3	10.0	-	-
	High school level	-	-	8	26.7	-	-
	College level	-	-	5	16.7	30	100
	Elementary graduate	-	-	1	3.3	-	-
	High school graduate	-	-	8	26.7	-	-
	College graduate	25	83.3	-	-	-	-
	Vocational	5	16.7	5	16.7	-	-
Total		30	100.0	30	100.0	30	100.0
Household size	0-5	16	53.3	12	40.0	10	33.3
	6-10	14	46.7	15	50.0	18	60.0
	11-15	-	-	3	10.0	2	6.7
Total		30	100.0	30	100.0	30	100.0
Number of years living in the area	1-5	9	30.0	6	20.0	8	26.7
	6-9	8	26.7	4	13.3	10	33.3
	10 and over	13	43.3	20	66.7	12	40.0
Total		30	100.0	30	100.0	30	100.0

Cultural Factors Affecting
Respondents Behavior

Table 7 shows the environmental factors that affect the consumer behavior that includes culture, economic and marketing.

Ethnic affiliation. Greater proportions of the professional respondents (43.3%) came from Mt. province, the rest were Kankanaey, Ibaloi and Kalanguya. For the non-professionals greater proportions (40%) were Kankanaey and the rest were either Ibaloi, came from Mt. Province and Kalanguya. As for the student's majorities (70%) of the respondents were Kankanaey and the rest were Ibaloi, came from Mt. province, Tagalog and Ilocano. Thus, result implies that respondents belong to different ethnicity/culture.

Effect of culture on the coffee consumption. Culture has a profound effect on why people buy. Culture affects the specific products people buy as well as the structure of consumption, individual decision making, and communication in society (Engel and Blackwell, 1995). All the respondents have stated that their culture has no effect on their coffee consumption.

Economic Factors Affecting
Respondents Behavior

Occupation. The occupation of a person has significant impact on his buying behavior. For example a marketing manager of an organization will try to purchase business suits, whereas a low level worker in the same organization will purchase rugged work clothes. Among the professionals, greater proportions (46.7%) were government employees, 33.3% were in business and the rest were self-employed. The non-professionals, many (40%) of them were businessmen/women, 33.3% were plain housekeepers, and the rest were farmers and laborers. All the students on the other hand are still in school.

Household average monthly income and allowance. The size of a family's income is an obvious determinant of how that family spends its income. Among the professionals, 46.7% had an income of Php10,000-20,000 monthly, 20% had earnings less than Php10,000 monthly and the rest are earning Php21,000- 40,000 monthly. As for the non-professionals 56.7% are earning less than Php10,000 a month and 36.7% earns Php10,000-20,000 a month and the rest are earning more than 21,000 a month. This implies that most of the respondents belong to the higher income group.

Marketing Factors Affecting Respondents Behavior

Availability of budget for Arabica coffee. Majority (53.3%) of the professional respondents stated that they have budget while 46.7% claimed that no budget allotted to buy Arabica coffee. For the non-professional, 33.3% has budget and 66.7% has no budget. And for the students there are 30% has budget allotted for Arabica coffee and 70% has no budget. The result implies that buying coffee is not a priority commodity for their food expenditures.

Source of Arabica coffee. Greater proportion of all the respondents: professionals (36.7%), non-professionals (43.4%) and students (33.3%) buy Arabica coffee in the public market and others buy Arabica in coffee shops and restaurant/cafeterias.

Table 7. Cultural, economic and marketing factors affecting respondent's behavior

CHARACTERISTICS		CLASSIFICATION OF PANELISTS					
		PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
		F	%	F	%	F	%
Ethnic affiliation	Ibaloi	7	23.3	9	30.0	4	13.3
	Ilocano	-	-	-	-	1	3.3
	Kalanguya	2	6.7	2	6.7	-	-
	Kankanaey	8	26.7	12	40.0	21	70.0
	Mt. province	13	43.3	7	23.3	2	6.7
	Tagalog	-	-	-	-	2	6.7
Total		30	100.0	30	100.0	30	100.0
Occupation	Businessman/ woman	10	33.3	12	40.0	-	-
	Farmer	-	-	3	10.0	-	-
	Gov't employee	14	46.7	-	-	-	-
	Housekeeper	-	-	10	33.3	-	-
	Laborer	-	-	5	16.7	-	-
	Self-employed	6	20.0	-	-	-	-
	Student	-	-	-	-	30	100
Total		30	100.0	30	100.0	30	100
Average monthly income/ allowance	<1000	-	-	-	-	11	36.7
	1,000-2,000	-	-	-	-	13	43.3
	2,000-3,000	-	-	-	-	6	20.0
	<10,000	6	20.0	17	56.7	-	-
	10,000-20,000	14	46.7	11	36.7	-	-
	21,000-30,000	6	20.0	2	6.7	-	-
	31,000-40,000	4	13.3	-	-	-	-
Total		30	100.0	30	100.0	30	100.0
Availability of budget	Have Budget	16	53.3	10	33.3	9	30.0
	No Budget	14	46.7	20	66.7	21	70.0
Total		30	100.0	30	100.0	30	100.0
Source of Arabica coffee	Public market	11	36.7	13	43.3	10	33.3
	Restaurants/ cafeterias	1	3.3	-	-	2	6.7
	Coffee shops	4	13.3	-	-	2	6.7

Properties of Coffee

Table 8 and 9 shows the factors about the properties of foods that affect the consumer behavior such as: the physiological effects and sensory perception on product attributes.

Awareness to caffeine content of coffee. Coffee being stimulant, when taken in moderation can improve endurance performance in physical activities. The chemical theobromine present in coffee is responsible for the widening of blood vessels increasing blood flow. It stimulates the production of Epinephrine, a hormone produced by the adrenal glands of the body; which causes an increase in heart rate, blood pressure and blood flow to muscles, thus increasing the level of alertness (Lampac, 2007). Caffeine is a bitter, white crystalline xanthine alkaloid that acts as a stimulant drug and a reversible acetylcholinesterase inhibitorit, it acts as a central nervous system stimulant, temporarily warding off drowsiness and restoring alertness. It is the world's most widely consumed psychoactive drug (Wikipedia N.D). As shown in Table 8, the awareness of the caffeine content of coffee and its physiological effects to the respondents. Most of the professional (86.7%) and students (73.3%) are aware while 43.3% of the non-professionals are unaware of the caffeine content of coffee.

Physiological effects of coffee consumption. Eating food reduces hunger, leads to satiation, and causes people to stop eating. The satiation effect of foods has considerable significance for consumers in the western world, given the prevalence of dietary concerns. Food properties affecting the degree of satiation include physical form, proportions of macronutrients and fiber, and energy value (Blundell et al. 1998). Solid foods have a greater satiation affect than liquid foods. The satiation effect of protein is larger than the equivalent of calorie value of fat or carbohydrate. Alcohol does hardly have a satiation effect, while the effect of fiber is substantial. High-calorie products reduce hunger more than low-calorie products. People learn to consume more energy-rich foods when hungry than when sated (Booth, 1982). Table 8 shows the perceived physiological effects of consuming coffee to the respondents. Majority of all the respondents, professional (53.3%), non-professionals (66.7%) and students (43.3%) claimed that drinking coffee had refreshing effects to the body. The respondents further claimed to reduce hunger, improve mental alertness and reduce stress.

Sensory Perception

Sensory evaluation of the two-coded type of coffee is shown in Table 9. The sensory evaluation was done to evaluate the acceptability of the product based on the following attributes: aroma, taste, color, appearance, and the general acceptability.

Furthermore, sensory evaluation gives real answer regarding consumer quality according to Mason and Nottingham (2002). It is a science of judging and evaluating the quality of the food by the use of senses as stated by Mabesa (1986). Caul (1957) also stated that the respondent should be generally healthy. Minor infections of the nose and throat might affect flavor perception. Nutritional health of the individual may also affect sensitivity. Acceptability ratings used in the taste test were as follows: extremely like, like, slightly like, neither like or dislike, dislike, slightly dislike, and extremely dislike to the different attributes identified. The professionals like the aroma of Arabica over Barako with higher computed mean value at 6.10 as compared to 6.00 respectively. Moreover, they also like the taste, and slightly like the color and appearance of Arabica. As to the general acceptability, the professionals like with slight difference between Arabica and Barako coffee. The respondents like also the aroma, taste, and slightly like the color, and appearance of Barako coffee with lower mean values. The result implies that the professionals prefer both type of coffee. Non-professionals on the other hand, like the aroma of Arabica as well as its color and appearance and had slightly likes to taste. As for Barako coffee, the non-professionals further like both aroma and taste and slightly like the color and appearance. As to the general acceptability, respondents like both Arabica and Barako coffee. The non-professionals however, had preferences to the attributes of Arabica than Barako. Among the students, they like the aroma and taste of Arabica and slightly like its color and appearance. In general, the students like Arabica. As for Barako, all its attributes including the general acceptability was liked by them. This implies that students prefer the attributes of Barako over the Arabica coffee.

Table 8. Awareness of the caffeine content of coffee and its physiological effects

AWARENESS	CLASIFICATION OF PANELISTS					
	PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
	F	%	F	%	F	%
Aware	26	86.7	17	56.7	22	73.3
Not Aware	4	13.3	13	43.3	8	26.7
Effects						
Reduce hunger	3	10.0	4	13.3	9	30.0
Refreshment purposes	16	53.3	20	66.7	13	43.3
Use idle time	3	10.0	6	20.0	5	16.7
Anti-oxidant	1	3.3	-	-	-	-
Alertness of mind during wee hours	3	10.0	-	-	3	10.0
Give strength	1	3.3	-	-	-	-
Treat migraine	1	3.3	-	-	-	-
Reduce stress	2	6.7	-		-	

Ranking of product attributes. Table 10 shows the respondents ranks the different attributes according to what they prefer most. The professionals had the highest preferences to aroma to both types of coffee, followed by taste, strength, color, and appearance. Similar observation holds true with the non-professionals, while the students however had higher preferences to taste. Other attributes were more or less had the same ranking for both types of coffee.

Need Recognition on Food

Importance of the nutritional quality of food. Knowing the nutritional contents of a food product is very important. Some people who have disease are careful on the food they intake. They have to know the ingredients or the contents of the food before buying and consuming it to avoid conflicts on their health. What if some contents of the products have negative side effects on their health? The respondents were asked if the nutritional contents of a food product are important to them or not. Table 11 shows the importance of nutritional quality of food to the respondents. Majority of all the respondents: professionals (80%), non-professionals (63.3%), and students (83.3%) claimed the importance of quality of foods. Few respondents stated that qualities of food are not important but sometimes considering. The result implies that most of the respondents give importance to the nutritional quality of foods being bought.

Table 9. Sensory evaluation of the two type of coffee

		ARABICA COFFEE											BARAKO COFFEE										
		RATING											RATING										
	ATTRIBUTES	7	6	5	4	3	2	1	Mean	Std. Deviation	DE	Rank	7	6	5	4	3	2	1	Mean	Std. Deviation	DE	Rank
PROFESSIONALS	Aroma	10	15	3	2	-	-	-	6.10	0.845	L	1	10	11	8	1	-	-	-	6.00	0.871	L	1.0
	Taste	9	14	7	-	-	-	-	6.07	0.740	L	2	8	11	8	3	-	-	-	5.80	0.961	L	2.0
	Color	6	15	5	2	-	2	-	5.30	1.725	SL	5	3	14	9	2	-	2	-	5.40	1.192	SL	4.0
	Appearance	5	12	8	3	-	2	-	5.43	1.278	SL	4	3	12	9	4	2	-	-	5.33	1.061	SL	5.0
	General Acceptability	6	17	3	4	-		-	5.83	0.913	L	3	4	15	8	3	-	-	-	5.67	0.844	L	3.0
NON PROFESSIONALS	Aroma	7	15	5	1	-	-	-	5.97	0.765	L	1	10	14	5	1	-	-	-	6.10	0.803	L	1.0
	Taste	11	13	5	1	-	-	-	4.77	1.716	SL	5	4	14	9	1	1	1	-	5.33	1.348	L	5.0
	Color	5	10	7	3	2	3	-	5.20	1.472	L	4	3	19	4	-	2	1	1	5.47	1.408	SL	3.0
	Appearance	3	16	4	1	1	2	1	5.33	1.493	L	3	3	14	7	4	2	-	-	5.40	1.070	SL	4.0
	General Acceptability	7	16	5	2	-	-	-	5.93	0.828	L	2	5	17	8	-	-	-	-	5.90	0.662	L	2.0
STUDENTS	Aroma	9	16	4	-	-	1	-	6.03	0.999	L	2	8	17	5	-	-	-	-	6.10	0.662	L	1.0
	Taste	2	14	9	4	-	1	-	6.13	0.819	L	1	3	17	7	-	2	1	-	5.53	1.137	L	3.5
	Color	-	22	3	-	2	2	1	5.27	1.461	SL	5	3	21	2	-	2	1	1	5.53	1.408	L	3.5
	Appearance	3	21	1	-	2	2	1	5.43	1.547	SL	4	3	20	3	-	2	1	1	5.50	1.408	L	4.0
	General Acceptability	6	20	2	-	-	2	-	5.87	1.167	L	3	6	18	6	-	-	-	-	6.00	0.643	L	2.0

Legend:
Statistical limit

1.00-1.49	1	Extremely dislike (ED)	2.50-3.49	3	Dislike (D)	4.50-5.49	5	Slightly like (SL)	6.50-7.00	7	Extremely like (EL)
1.50-2.49	2	Slightly dislike (SD)	3.50-4.49	4	Neither like nor dislike (N)	5.50-6.49	6	Like (L)			

Table10. Ranking of the product attributes

	CLASIFICATION OF PANELISTS								
	PROFESSIONALS			NON PROFESSIONALS			STUDENTS		
Attributes	Mean	Std. Deviation	Rank	Mean	Std. Deviation	Rank	Mean	Std. Deviation	Rank
Aroma	2.60	1.476	2	2.73	1.202	2	2.30	1.179	2
Taste	1.77	0.898	1	1.73	0.944	1	1.93	1.081	1
Color	3.27	1.337	4	3.20	1.349	3	3.53	1.332	4
Strength	3.10	1.062	3	3.43	1.165	4	3.40	1.303	3
Appearance	4.30	0.915	5	3.90	1.423	5	3.73	1.258	5

Considerations before buying coffee. Tables 12 show the considerations of the respondents towards buying and how many of them agreed or not agree on the presented considerations. Greater proportion of the respondents agreed that health benefits of the product and the personal or psychological factor (personal wants based on experience and motives) are the most important factor to consider before buying their coffee.

All of the respondents agree that health benefits should be considered in buying a product. Hence, the producer should take this consideration to their product. Consumers should be aware of the health benefits of a product before buying and consuming to avoid costs. We all know that many people get sick and even die due to unhealthy foods.

One more important consideration agreed by most of the respondents is the personal or psychological factor (personal wants based on experience and motives). Perception towards the product also needs to be considered as agreed by most of the respondents. They may believe that the product is more salable if and only if the consumer thought that the product quality is good. Perception is the process by which people select, organize, and interpret information to form a meaningful picture of the world (Irwin, 1977). A product exists in marketing only if consumers perceive that to satisfy their wants. Behaviors (attitudes of other people towards Arabica coffee) were also being highly considered as agreed by majority of the respondents. Brand is also being considered as agreed by 70% professionals, 56.7% non-professionals and 76.7% students. Traditions (brewed coffee are more known and more traditionally used) were disagreed by majority of the professionals and non-professionals while 60% of the students agreed otherwise. Thus, the traditions are less considered by the professionals and non-professionals who could be attributed from educational, work status and religious affiliation. Social interest (having similar interest with a group) is agreed by majority of the students (63.3%) and non-professionals (53.3%) while majority of the professionals (56.7%) disagreed. This means that professionals give lesser consideration to the interest of their group. Cultural consideration (beliefs towards what people must drink) was disagreed by most of the respondents: professionals (76.7%), non-professionals 83.3% and (66.7%) students. Thus culture is less considered by the respondents in buying coffee.

Table 11. Importance of the nutritional quality of food

PARTICULARS	CLASSIFICATION OF PANELISTS					
	PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
	F	%	F	%	F	%
Important	24	80.0	19	63.3	25	83.3
Unimportant	1	3.3	3	10.0	2	6.7
Sometimes	5	16.7	8	26.7	3	10.0

Table 12. Considerations before buying coffee

PARTICULARS	CLASIFICATION OF PANELSISTS											
	PROFESSIONALS				NON-PROFESSIONALS				STUDENTS			
	AGREE		DISAGREE		AGREE		DISAGREE		AGREE		DISAGREE	
	F	%	F	%	F	%	F	%	F	%	F	%
Brand of the product	21	70.0	9	30.0	17	56.7	13	43.3	23	76.7	7	23.3
Health benefits of the product	30	100.0	-	-	30	100.0	-	-	30	100.0	-	-
Traditions (brewed coffee are more known and it is more traditionally used)	14	46.7	16	53.3	10	33.3	20	66.7	18	60.0	12	40.0
Behaviors (Attitudes of other people towards Arabica coffee)	21	70.0	9	30.0	22	73.3	8	26.7	21	70.0	9	30.0
Cultural (Beliefs towards what people must drink)	7	23.3	23	76.7	5	16.7	25	83.3	10	33.3	20	66.7
Social Interest (Having similar interest with a group)	13	43.3	17	56.7	16	53.3	14	46.7	19	63.3	11	36.7
Personal or psychological factor (Personal wants based on experience and motives)	27	90.0	3	10.0	27	90.0	3	10.0	23	76.7	7	23.3
Perception (ideas about Arabica coffee)	25	83.3	5	16.7	23	76.7	7	23.3	26	86.7	4	13.3

Search for information

Source of Information About Arabica. The most important information source is consumers' previous experience with the food product (Steenkamp *et al*. 1996). This information search is inversely related to prior purchase experience, involvement with the product category, time pressure, and quality variation between product alternatives, and stability of the product category (Engel et al. 1995). Table 13 shows where the respondents learn about Arabica coffee. Majority of the professionals (65%) learned about Arabica through their friends, relatives, colleague and others, the rest were through articles in newspapers and from their descendants. The non-professionals, 53.3% were shared by their relatives and friends and the rest were through advertisement, articles, and from their descendants. And for students, sixty nine percent learned about Arabica from friends, relatives, etc. and the rest from advertisement and any subjects.

Evaluation Towards Arabica Coffee. Table 13 further shows the respondents evaluation towards Arabica coffee when compared to other coffees. Many of the professionals (46.7%) had rated Arabica coffee as very good while the non-professionals (46.7%) and students (43.3%) had rated as good. Hence, the result indicates some differences among the respondents how they perceived about Arabica coffee.

Choice Between Arabica and Barako in
Terms of Attributes

Table 14 shows the respondents choice between Arabica and Barako coffee in terms of attributes after the taste test. Choice attitude theory posits that in principle, the product alternative with the most positive attitude will be chosen (Fishbien and Ajzen, 1975). In terms of aroma, majority of the respondents has preference choice to Arabica over Barako coffee. As to taste however, majority professionals (53.3%) had preference to Barako, while majority of the non-professionals (63.3%) and students 60% has chosen Arabica. For the color attribute, majority of the professionals (56.7%) and non-professionals (56.7%) has chosen Barako and the students (66.7%) choose Arabica. In terms of strength, majority of the professionals (53.3%) and students (56.7) prefer Arabica, while the non-professionals both Arabica and Barako earned 50% each. Majority of all the respondents has chosen Arabica in terms of appearance. And as for the general acceptability majority of the respondents has chosen Arabica. The result implies that given the attributes, majority of all the respondents had preference to Arabica than Barako coffee.

Table 13. Source of information and evaluation about Arabica Coffee

PARTICULARS	CLASIFICATION OF PANELISTS					
	PROFESSIONALS		NON-PROFESSIONALS		STUDENTS	
	F	%	F	%	F	%
Advertisement	-	-	3	20.0	4	17.4
Articles in newspapers	6	30.0	1	6.7	-	-
Learned from any subjects	-	-	-	-	3	13.0
Shared by friends, relatives etc.	13	65.0	8	53.3	16	69.0
Learned from descendants	1	5.0	3	20.0	-	-
***multiple response**						
Evaluation						
Excellent	3	10.0	5	16.7	6	20.0
Very Good	14	46.7	11	36.7	11	36.7
Good	13	43.3	14	46.7	13	43.3
Poor	-	-	-	-	-	-

Table 14. Choice between Arabica and Barako coffee in terms of attributes

ATTRIBUTES	PROFESSIONALS				NON-PROFESSIONALS				STUDENTS			
	ARABICA		BARAKO		ARABICA		BARAKO		ARABICA		BARAKO	
	F	%	F	%	F	%	F	%	F	%	F	%
Aroma	18	60.0	12	40.0	18	60.0	12	40.0	16	53.3	14	46.7
Taste	14	46.7	16	53.3	19	63.3	11	36.7	18	60.0	12	40.0
Color	13	43.3	17	56.7	13	43.3	17	56.7	20	66.7	10	33.3
Strength	16	53.3	14	46.7	15	50.0	15	50.0	17	56.7	13	43.3
Appearance	16	53.3	14	46.7	16	53.3	14	46.7	16	53.3	14	46.7
General Acceptability	17	56.7	13	43.3	22	73.3	8	26.7	20	66.7	10	33.3
Choice bet. Arabica and Barako	22	73.3	8	26.7	21	70.0	9	30.0	18	60.0	12	40.0

<u>Chi-square Values of the Product Attributes</u>

Table 15 presents the chi-square of the product to the respondents. Chi-square values show that the relationship of the product attributes to the respondents is not significant which means that the difference in terms of preferences (like or disliked) is negligible. As to aroma, taste, color, and general acceptability there is no significant difference among the respondents. In appearance, there has highly significant difference among the three group or respondents. Therefore, the respondents perceived differently from the appearance of the two coffees being studied.

Table 15. Chi-square values of the product attributes

ATTRIBUTES	CHI-SQUARE VALUES	MEAN	
		ARABICA	BARAKO
Aroma	0.364^{NS}	6.10	6.00
Taste	1.900^{NS}	6.07	5.80
Color	4.358^{NS}	5.30	5.40
Appearance	0.000^{**}	5.43	5.33
General Acceptability	1.870^{NS}	5.93	5.67

Legend:

**-highly significant	NS-not significant
average mean	
1.00-1.49	Extremely dislike
1.50-2.49	Slightly dislike
2.50-3.49	Dislike
3.50-4.49	Neither like nor dislike
4.50-5.49	Slightly like
5.50-6.49	Like
6.50-7.00	Extremely like

Comments and Suggestions for the Improvement of the Product

Respondents gave their comments and suggestions on the product. This would serve as basis in the improvement of the product to suit the taste and preferences of the consumers. Common comments were as follows: make the product available in any market outlets, labeling should be present in the packaging, improve packaging material used. Some of the respondents mentioned that they do not know where to buy Arabica coffee. From the comments of the respondents, it is obvious that there are lots more to improve product especially on its market outlet and packaging. Packaging must be appealing to serve as the manufacturer's silent sales person.

As an outgrowth of the increase in purchasing power and the importance of time, there has been a substantial increase in the consumer's desire for convenience. They want products ready and easy to use or preference on pre-processed product. They want these products packed in a variety of sizes, quantity and forms. How potential customers see a firm's product affects how much they are willing to pay for it, where it should be made available, and how eager they are for it and if they want it all.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was conducted to determine the group of consumers that consume Arabica coffee, consumer behavior towards Arabica coffee, to identify the factors affecting the consumer's behavior. Two tools were employed in the data gathering product testing through sensory evaluation, and survey questionnaire for the consumer behavior towards the product. There were ninety panelist/respondents who were chosen and classified as to respondent group; professional, non-professional and students. The data gathered were examined and analyzed using the descriptive method like frequency, mean, and percentage. Respondents evaluated the product whether they like it according to its aroma, taste, color, and appearance.

Results showed that professionals are the main consumers of Arabica coffee among the respondents. The main factor influencing the professional, non-professionals and students to consume Arabica coffee is the preferences of their family members, as for the factors influencing other respondents not to consume Arabica were the following, professionals dislike the taste, non-professionals and students do not want to change the kind of coffee they currently consuming. As for the factors affecting the behavior of the respondents were the following, in terms of physiological effects the respondents are aware of the caffeine contents of coffee and they consume coffee because it is refreshing. Result also showed that respondents prefer Arabica than Barako coffee and taste was ranked first as to the preference in terms of the product attributes. Nutritional qualities were also important to the respondents. For the person related factors, most of the respondents mentioned that their coffee consumption has no effect on their age, their body weight and culture. The perception about Arabica is just like other coffees or it is considered to be as an ordinary coffee. Professionals have budget allocated to buy for Arabica coffee while both non-professionals and students claimed have no budget in buying coffee. The respondents commonly buy Arabica coffee at public market. Moreover, buying and consuming coffee had health benefits and personal wants was highly considered. And Arabica was highly preferred by the respondents compared to Barako coffee.

Conclusions

Based on the findings of the study, the following conclusions were made:

1. Professionals were the major consumers of Arabica among the respondents;
2. The most common factor influencing consumers to buy the product was the family preferences on foods;
3. The factors that influence the consumers not to buy the product were the ff: professionals dislike the taste; while the non-professionals and students do not want to change the kind of coffee they are currently consume;
4. The respondents perceived that coffee consumption has no effects on the age, body weight and does not change their culture;
5. As to the sensory evaluation, the taste panels like/accept brewed Arabica however, when compared to brewed Barako coffee, the latter was mostly preferred;
6. In buying coffee, most respondents consider the health benefits and personal wants; and,
7. The main perception of respondents about the two types of brewed coffee is just like other coffees or considered as an ordinary coffee.

Recommendations

This study recommends the following:

1. As the result showed professional respondents were the major consumer of Arabica coffee, so it is recommended that more promotion should be done in order for other potential consumers to know about Arabica coffee;
2. Market outlet for Arabica coffee should be expanded and make it easily accessible for the consumers;
3. The study showed that the respondents usually buy brewed coffee in grounded form so the producers of Arabica should consider improving the packaging and marketing of the product;
4. The researcher recommends that Arabica should be subjected for further market testing covering other market segments to determine the real potential market. Mass production and market testing should be done;

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