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Original Research Article

Consumers' Behavior Towards Instant Coffee Drinking in Malaysia

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Abstract: Over the last decade or two, the amount of imported coffee beans has been increasing significantly with the development and expansion of coffee café outlets, the 3- in-1 coffee sachet producers, and the increasing demand for coffee by Malaysians. Understanding Malaysian consumers' coffee-drinking behavior is important for manufacturers and marketers of coffee and coffee-related products to achieve success in the industry. The objective of this study is to disclose the behavior of coffee drinkers in Malaysia focusing on consumption trends and preferences. A survey was conducted using a structured questionnaire in Klang Valley, Selangor where a total of 500 respondents were selected using the systematic random sampling method. Descriptive analysis, factor analysis, and binary logistic regression were applied as analytical methods. The results of descriptive analysis indicate that 85.4% of the respondents are coffee drinkers, while 14.6% of the respondents are non-coffee drinkers. Factor analysis underlined six latent factors, which indicate each coffee drinker's dimensional preference for instant coffee. The factors are price, convenience, product attribute, influence by others, and promotions. The binary logistic regression analysis shows that marital status, occupation, education, convenience, and influence by others are influential determinants of coffee preference between instant and other types of coffee. By identifying Malaysian consumer's preferences, manufacturers, marketers and retailers can understand how they can attract Malaysian consumers to purchase more coffee. Furthermore, this study can enhance retailers' marketing strategy to attract more consumers to purchase their instant coffee.

Keywords: instant; coffee; consumption; preferences; marketing

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1. Introduction

Coffee is one of the world's most popular beverages and has grown steadily in commercial over the last 150 years (Daglia et al.,2000). Coffee is an important plantation crop in some countries and belongs to the Rubiaceae family, Cinchonoideae subfamily and Coffea tribe (Clifford et al., 1989). Coffee is produced from the seeds of an evergreen tree or shrub of the Rubiaceae family whose members are largely tropical or subtropical plants. This family contains about 400 genera and 4,800 to 5,000 species (Bridson and Estrada, 1988). There are three common species of coffee which are Robusta, Arabica and Liberica (Tornincasa et al., 2010). Only the first two, Robusta and Arabica are commercially important due to being high-yielding plants and resistant to disease (Tornincasa et al., 2010). Arabica can grow well in Central America, Brazil and some areas in East Africa and Madagascar. Meanwhile, Robusta is the second major type of coffee and suitable areas to plant Robusta is in West Africa, the lower regions of Central and South America and the Caribbean as well as, large parts of Southeast Asia (Pieterse and Silvis, 1988). Figure 1 shows coffee production areas for different types of coffee in the world. Robusta coffee is cheaper to produce than the Arabica and is increasing in importance, particularly for "instant" coffee (Andha et al., 1985) products. In Malaysia, about 95% of coffee beans come from Liberica plants, which account for less than 2% of the world's coffee (Wallengren, 2002). Coffee is grown in over fifty-three countries worldwide, all of them located near the equator between the Tropic of Cancer and Capricorn zones. According to the International Coffee Organization (ICO) (2015), Brazil is the largest world producer of coffee, contributing to around 30% of total world output of coffee and produces more than 50 million bags (60 kg per bag) of coffee every year. The largest coffee importer is the United States of America (USA), where its imports are 23% of total world production (Fridell, 2014).

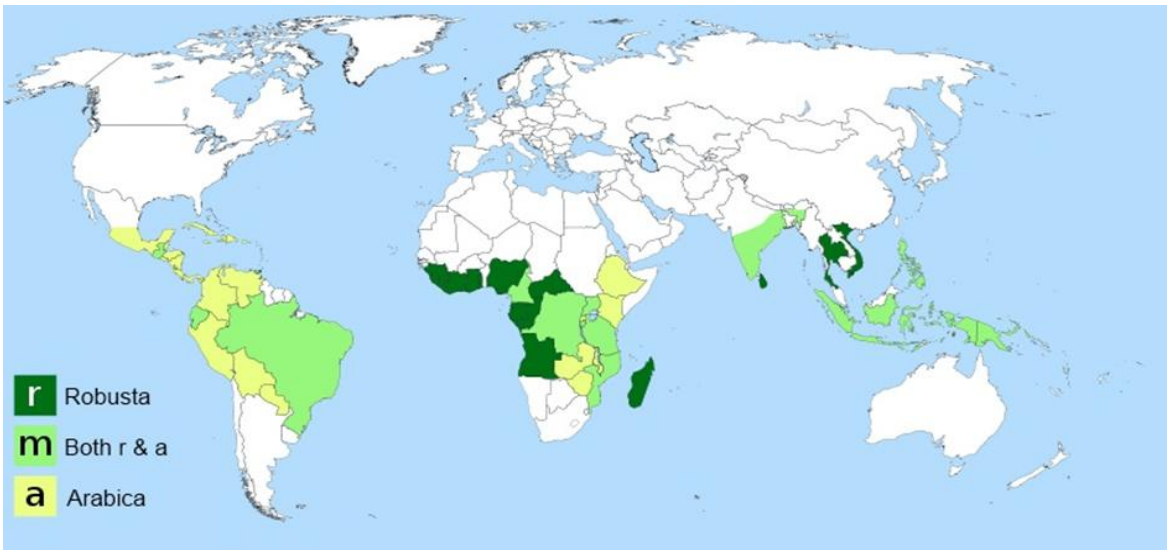

Figure 1: Area of two famous types of coffee production in the world: Robusta and Arabica
Source: International Coffee Organization (2006)

Table 1: Main coffee producing countries (2018)

Country	Total Production (,000 bags)-60KG/Bags
Brazil	65,131
Vietnam	31,683
Indonesia	9,618
Colombia	13,858
Ethiopia	7,541
Honduras	7,328
Peru	4,263
India	6,002
Mexico	4,351
Guatemala	4,007

Source: International Coffee Organization (ICO) (2020)

Coffee beans were mostly planted by smallholders either as monocrops or as inter-crops with coconut trees. The total area under coffee beans cultivation has declined from 3,538 hectares in 2008 to less than 3,000 hectares in 2015. Even though the consumption of coffee in Malaysia has increased over the years, yet, the cultivated areas remain below 3,000 hectares, at 2,621 hectares in 2016. This is due to lack of interest among Malaysian farmers in growing coffee due to lower price of coffee in the market and low-income gains compared to oil palm and other cash crops. Being rational farmers, to maximize their income and production, most of the producers change their coffee areas to other value crops. Table 2 shows the agricultural land use in Malaysia for the years 2015 and 2016.

Table 2: Agricultural Land Use in Malaysia, Hectare (Ha), 2015 and 2016

	2015	**2016**
Rubber	1,074,400	1,078,000
Oil Palm	5,642,943	5,737,985
Sago Palm	62,570	44,038
Coffee	2,361	2,621
Tea	2,269	2,269
Cocoa	18,122	17,421
Pepper	16,333	16,768
Paddy	681,559	688,770
Coconut	82,001	84,609
Pineapple	14,701	13,149

	2015	**2016**
Fruits	199,709	194,970
Vegetables	68,927	63,569
Flowers	2,610	2,559
Cash Crops	20,565	20,141

Source: Ministry of Agriculture and Agro-Based Industry Malaysia (MOA) (2018)

To meet the demand for coffee in Malaysia compared to its low home-grown coffee beans, importation of coffee beans is required. Table 3 shows the importation of green coffee beans to Malaysia from 1965 to 2015 and shows an increasing trend over the years.

Table 3: Importation of Green Coffee by Malaysia, 1965-2018. ('000 60 kg bag)

Year	Imports	Year	Imports
1965	44	2005	390
1970	39	2010	940
1975	45	2015	1,340
1980	35	2016	1,440
1985	77	2017	1,510
1990	120	2018	1,575
1995	278		
2000	355		

Source: United States Department of Agriculture (2020)

The coffee drinking culture has been in Malaysia for many years. The first coffee tree planted in Malaysia was by the British in 1799 and was from the Rubiaceae family. Coffee drinking has been part of Malaysian daily beverage like any other countries in the world. Though Malaysia is not the largest producer of coffee in the world, the coffee beverage industry has been attracting people's attention for years as can be seen in the events such as the "Malaysia International Tea & Coffee expo 2013", "Coffee, Tea & Desserts Festival Asia 2014" "Cafe' Show Malaysia 2015", "World Tea & Coffee expo 2015", and the "Grand Plans for Inaugural Café Malaysia 2015," where people, especially Malaysians, are seen to love drinking coffee. Studies have shown that 81 percent of Malaysians consider themselves a coffee person and around 26 percent drink coffee every day and 25 percent of Malaysians drink 2 – 3 times a week (Harith et al., 2014). Since coffee outlets in Malaysia are increasing in number, consumers are slowly showing signs of more sophisticated demand regarding the quality of coffee. For example, although instant standard coffee remained the most popular

type of coffee through retail channels in 2012, various consumers have switched their demand to fresh brewed coffee (Malaysia country report, 2013).

2. Literature Review

There are many studies conducted by fellow researchers on the beverage industry involving not only tea and coffee, but also dairy drink products all over the world. In Indonesia, research was conducted by Primadani et al. (2012) to analyze coffee consumers' drinking behavior among 100 Indonesian respondents in Jember. Descriptive, hierarchy process and factor analysis were applied to analyze the data. The results show that consumers prefer various kinds of coffee brands and never stick to one brand, either imported or locally produced coffee. This indicated that there were no fixed preferences for coffee in terms of brand name or country of origin. There are several factors that influence consumers when purchasing coffee, such as: availability, product attributes, price and product quality. On the other hand, in India, Krishnakumar and Chan-Halbrendt (2010) investigated consumer preferences for imported Kano coffee among South Indian consumers. They applied the conjoint choice experiment model in order to understand the respondents' preferences based on a set of structured survey questions. There are four product attributes that influence consumer preferences for Kona coffee such as price, taste, grind preference, and place of origin. While price was shown to be relatively important, however the results showed that consumers' preference was for the strong taste and aroma of Kona coffee. Monirul and Han (2012) studied the perceived quality and attitudes toward tea and coffee. A total of 100 South Korean consumers were selected as respondents. Fishbien's multi-attribute model and t-test were used to compare the attitudes of the consumers toward tea and coffee. The findings showed that consumers' attitudes toward coffee and tea are different among Korean consumers. They had a more positive attitude towards coffee compared to tea from the aspect of availability, different flavors, and environment of shop attributes. The results suggest that tea firms need to pay more attention to their marketing strategy to attract more consumers (Monirul and Han, 2012). The preference for canned coffee in Taiwan was studied by Shih et al. (2008) in terms of canned coffee attributes. A total of 385 respondents were selected at instant coffee stores. The conjoint analysis method was used to analyze demographical differences influencing their preference towards a combination of canned coffee attributes. The findings indicate that the price of the canned instant coffee is the major factor that affects the consumers' purchasing behavior toward instant coffee, while brand, capacity, packing materials and taste of the instant coffee were not the main factors that affect Taiwanese consumers' choice in purchasing coffee.

Given the fact that there are so many types of coffee, brands and different product attributes of coffee, it is important to understand consumers' coffee-drinking behavior, by gaining insights into the consumption trends among Malaysian coffee drinkers and investigating their preferences. The specific objectives of this study are: (1) to uncover the underlying factors for instant coffee choices, and (2) to clarify the factors influencing coffee preference between instant and other types of coffee including brewed coffee intake at home or outside coffee retailers.

3. Methodology

Five hundred (500) respondents were interviewed via a structured questionnaire. The respondents were selected by a systematic random sampling method in Klang Valley, Selangor. The data collected was analyzed using descriptive, factor and binary logistic regression analysis. Descriptive analysis was to illustrate the demographic profile of the respondents and their level of perception, knowledge, and attitudinal characteristics. To uncover the underlying factors for instant coffee choices, factor analysis was applied to reveal the dimensions of instant coffee preference among Malaysian consumers. Respondents were asked to express agreement or disagreement, on a seven-point Likert scale, with regards to their perception, knowledge, and attitude towards instant coffee drinking behavior. It generated important latent factors that could explain the coffee drinkers' attitude towards coffee and related products. In the factor analysis model, p denotes the number of variables (X_1, X_2, …X_p) and m denotes the number of underlying factors (F_1, F_2, …F_m). X_j is the variable represented in latent factors.

$$X_j=a_{j1}F_1+a_{j2}F_2+\ldots\ldots a_{jm}F_m+e_j$$
$$\text{where } j=1, 2,\ldots.. p$$

In order to clarify the factor influencing the coffee preference, Binary Logistic Regression (BLR) analysis on the other hand examines the statistical relationship between two or more variables, where a change in the dependent variables is associated with changes in one or more independent variables. It is to clarify the mechanism of the relationship between consumer preference for instant coffee and other types of coffee such as brewed coffee. Consumers' demographic profiles such as age, education level, gender and the likelihood of types of coffee drinkers' preference between instant and other types of coffee are shown in Model 1. The dimension of coffee preference from factor analysis will be included in Model 2. The general form of regression model:

$$Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta p\, Xp + \varepsilon i$$

where,

Z = linear combination

β_0 = constant

$\beta_1, \beta_2 \ldots \beta_p X_p$ are partial regression coefficients

$X_1, X_2 \ldots X_p$ are the independent variables

$\mathcal{E}_i$ = error term

Specifically, the BLR model can be written as follows:

Model 1:

Y = log Pi/1-P_i is the odd that a particular choice will be made

Y =$\beta_0 + \beta_i$ X_i ($_{Demographic\ profile}$) + + *Error term*

Y = coffee preference (between instant and other types of coffee)

Y = 1 if the respondent preferred instant coffee and 0 if the respondent preferred coffee other than instant coffee

β_0 = constant

β_i= coefficient of X_i

X_1= Gender (dummy:1=male, 0=female),

X_2 = Age (year old),

X_3= Marital status (dummy: 1=single, 0=married),

X_4= Household income per month (RM),

X_5 = Education (dummy:1=above tertiary, 0=below tertiary),

X_6= Occupation [1] (dummy: 1=student, 0=otherwise), and

X_7= Occupation[2] (dummy: 1=working, 0=otherwise).

Model 2:

Y = log Pi/1-P_i is odd that a particular choice will be made

Y =$\alpha_0 + \alpha_i$ X_i ($_{Factor\ scores}$) + + *Error term*

Y = coffee preference (between instant and other types of coffee)

Y = 1 if the respondent preferred instant coffee and 0 if the respondent preferred other than instant coffee

α_0 = constant

α_i = coefficient of X_i (to be determined after factor analysis being estimated)

4. Results And Discussion

Five hundred (500) respondents were selected in Klang Valley, Selangor. Among the 500 respondents, 55.6 % were female respondents, while 44.4 % were male. The age of the

respondents ranged from 16 to over 70. One hundred ninety-two (192) total respondents aged below 24 years old represented 38.4 % of the total sample population. Thirty-nine percent (39.4%) of the respondents were aged between 25 to 34 years old. About 60 respondents (12.0 %) were in the range of 35 to 44 years old and only 46 respondents (9.2 %) were in the range of 45 to 54 years old. In terms of respondents' education level, it was divided into 3 categories, primary school, secondary school and tertiary education. More than half of the respondents had attained tertiary education (58.6 %), while 180 respondents (36.0 %) and 26 respondents (5.2%) had attained primary and secondary school level education, respectively. For marital status, 262 respondents (52.4 %) were single, while 234 respondents (46.8 %) were married. In terms of household size, majority of the respondents had 3 to 5 family members (51.6 %), followed by respondents with 6 to 8 family members (29.6%), respondents with less than 2 family members (14.0%) and respondents with more than 8 family members (4.8%). In the case of occupational status, 92 respondents (18.4%) were in the government sector and 218 respondents (43.6%) in the private sector. There were 138 respondents (27.6 %) who identified themselves as students, 8 respondents (1.6%) were retired, and 14 respondents (2.8%) were unemployed. Other categories, such as housewife, comprised about 6%. Among the 500 respondents, majority of the respondents (52.8 %) had moderate income of between RM1,501 to RM3,000 per month; 147 respondents (29.4 %) fall into the income category of less than RM1500; followed by 80 respondents (16.0%) in the range of RM3,001 to RM5,000. Table 4 shows the respondents' socio- demographic profiles. The respondents' socio-demographics play an important role in decision making and consumption behavior of coffee products. The marketeers can utilize the socio-demographic characteristics to identify their target markets.

Table 4: Respondent's demographic profiles of the study (n=500)

Demographic Variables	Frequency	Percentage (%)
Gender		
Male	222	44.4
Female	278	55.6
Race		
Malay	148	29.6
Chinese	267	53.4
Indian	60	12.0
Others	25	5.0

Demographic Variables	Frequency	Percentage (%)
Age		
<24	192	38.4
25 – 34	197	39.4
35 – 44	60	12.0
45 – 54	46	9.2
>55	5	1.0
Education Level		
Primary school	26	5.2
Secondary school	180	36.0
Tertiary education	293	58.6
Marital Status		
Single	266	53.2
Married	234	46.8
Household Size		
<2	70	14.0
3 – 5	258	51.6
6 – 8	148	29.6
>8	24	4.8
Occupation		
Government sector	92	18.4
Private sector	218	43.6
Student	138	27.6
Retired	8	1.6
Unemployed	14	2.8
Others	30	6.0
Income		
<1,500	147	29.4
1,501 – 3,000	264	52.8
>3,001	89	17.8

Descriptive analysis of coffee drinkers' characteristics

The discussion on consumer preferences focuses on their consumption patterns and choice of coffee types, either instant or fresh brewed coffee. Instant in this case could be granulated instant coffee or instant pre-mixed coffee, such as, 3-in-1, 2-in-1, etc. In this study

the herbal instant coffee, which considered as added value coffeesuch as '*tongkat ali'*, '*kacip fatimah*', '*kopi jantan*', *kopi radik*' etc. are classified as instant pre-mixed coffee as well. As shown in Table 5, 85.4 % of the interviewed respondents (427 respondents) drink coffee and surprisingly 14.6% were non-coffee drinkers. In this study we only focused on the 427 respondents that drink coffee. Among the 427 respondents almost half usually drink coffee at home, while the rest of the respondents' drink at coffee shops and other places such as Mamak (Mamak is a reference to well-known and widespread restaurants serving Indian based cuisine and tea and coffee besides other beverages operated by Indian Muslims all over Malaysia) cafes and restaurants. In terms of frequency of coffee consumption per day, majority of the coffee drinkers (65.1%) consumed more than 4 cups of coffee per day, followed by 3 cups (18.5%), 2 cups (11.5%) and 1 cup (4.9%). In terms of coffee drinkers' preference between instant coffee and other types of coffee, more than half of the coffee drinkers (69.8%) prefer to consume instant coffee compared to other types of coffee.

Table 5: Consumer preferences and choice of coffee consumption

Statements	Frequency	Percentage (%)
Do you drink coffee?		
Yes	427	85.4
No	73	14.6
Place normally consumes your coffee		
Home	206	48.2
Coffee shop	167	39.1
Others	54	12.7
Total	**427**	**100**
Coffee preference: Which coffee do you consume more often?		
Instant coffee (including pre-mixed)	277	64.8
Other types of coffee (brewed coffee)	150	35.2
Frequency of coffee consumption		
> = 5 cups per day	170	39.8
>4 cups per day	108	25.3
> 3 cups per day	79	18.5
> 2 cups per day	49	11.5
> 1 cup per day	21	4.9

Insights on coffee drinkers' preference for instant coffee

Amongst the coffee drinkers, nearly 70.0% of the respondents prefer to drink instant coffee. By conducting Exploratory Factor Analysis (EFA), latent factors of coffee drinkers' insights and preferences towards instant coffee can be determined. The EFA is a method for investigating whether a number of variables of interest are linearly related to a smaller number of unobservable factors. Factor analysis involves grouping together the set of variables that are highly correlated. The Keiser-Meyer-Olkin (KMO) and Barlett's tests were used to measure sampling adequacy and the correlation among the variables. Normally, the acceptable values of the KMO should be greater than 0.5, while Bartlett's Test of Sphericity tests the presence of correlations among the variables and whether the correlation matrix is an identity matrix, which would indicate that the factor model is inappropriate. For Factor Analysis to be recommended as being suitable, the Bartlett's Test of Sphericity must be less than 0.05. As shown in Table 6, the result for the KMO value falls in the acceptable range, which is 0.857, and is thus adequate for completing this study. Further, the Bartlett's Test of Sphericity shows that the correlation among the variables is significant at 1 percent levels. Since the Bartlett's Test is significant (p=0.000), it is small enough to reject the hypothesis, and it can thus be concluded that the factor analysis is appropriate.

Table 6. KMO and Bartlett's Test of respondents.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.857
Bartlett's Test of Sphericity	Approx. Chi-Square	7994.850
	df	351
	Sig.	0.000

The results of the EFA analysis discovered five underlining latent factors of instant coffee drinkers. These five factors indicate preference towards instant coffee vis a vis the other types of coffee. The results for the factor analysis are summarized in Table 7. The Eigen values obtained from the analysis are greater than 1 and generated five factors with the total variance accumulated at 64.83 % for the 30 original variables stated in the questionnaire. Five factors obtained included price, convenience, product attributes, influence by others and promotion of the product.

Factor 1: Competitive Price

The first factor is the price for the instant coffee, with a total variance of 29.009 %, and consists of seven sub-variables. The seven sub-variables seem to be the major leading factors that influence consumer decision making towards preference for instant coffee. The sub-variable of "Price is important to me when I make a purchase decision of instant coffee" has the highest factor loading which is 0.823, followed by "I will not spend too much money on brewed coffee because it is expensive" which is 0.814, "Instant coffee is normally cheaper than drinking in a coffee shop or restaurant" is 0.811, "I prefer instant coffee because the price is reasonable" is 0.800, "I consume instant coffee because it is worth my money" is 0.692, "Although the price of instant coffee differs from one brand to the other, it gives me choices that suit my taste preference" is 0.672, and "I think the price of instant coffee is cheaper than having it in the restaurant, with the same great taste" is 0.616. The results indicate that consumers will carefully watch the amount spent on instant coffee consumption.

Factor 2: Convenience

The second factor is convenience with a total variance of 12.398 %, which consists of five sub-variables. The factor loading for these sub-variables are "I can prepare instant coffee faster" (0.860), followed by "In my opinion, instant coffee can be prepared easily and simply" (0.815), "In my opinion, drinking instant coffee can help me save time" (0.756), "Busy lifestyle makes me purchase instant coffee due to it being easy to prepare" (0.751), and "Instant coffee is easily available in shops and supermarkets" (0.711). These days most people are busy with their work and so they want some things to be fast and convenient to prepare. Automatically, instant coffee becomes the best choice for them since instant coffee is available everywhere and is easy to prepare.

Factor 3: Product attributes

Product attributes are ranked as the third factor in this analysis and consists of five sub-variables with a total variance of 11.853 %. The factor loading of these sub-variables are "I prefer to drink instant coffee since it has a good taste that is to my liking" (0.781), "I drink instant coffee because it makes me feel fresh" (0.752), "In my opinion, instant coffee has the right mix of ingredients that make it tasteful" (0.742), "I prefer instant coffee because it tastes and smells good" (0.695), and "Based on my previous purchasing experience, I believe that the quality of the instant coffee is good" (0.617). The results show that consumers have preference for instant coffee because it can bring health benefits to the consumers. Further, consumers can choose different types of instant coffee that they want.

Factor 4: Influence by others

The fourth ranked factor that influences consumer's preference towards instant coffee is the influence by others which consists of four sub-variables. This factor has a total variance of 6.730 %. The factor loading of these sub-variables are "My family normally serves instant coffee whenever I visit them" (0.808), followed by "My friends normally order instant coffee whenever we go out for a coffee drink" (0.803), "My friends will normally bring instant coffee along whenever we go outstation together" (0.785), and "Instant coffee is very common in my social circle" (0.676). This shows that consumers might be influenced by close others to consaccepting or accept instant coffee in their daily life.

Factor 5: Promotion

Promotion is ranked as the fifth factor in this analysis which consists of four sub-variables with a total variance of 4.835 %. The factor loading for these sub-variables are "The most advertised brands of instant coffee seem to influence me to purchase it" (0.797), followed by "Promotion of instant coffee encourages me to consume instant coffee" (0.776), "I always pay attention to advertisements of instant coffee sales" (0.749), and "Promotion is a powerful tool to attract my intention to purchase instant coffee" (0.619). Marketers can try to promote instant coffee by introducing new products via the internet.

Table 7. Summary for factor analysis results on instant coffee preference

Dimensions (factors)	Sub- Variables Loading				
Factor 1: Price	F1	F2	F3	F4	F5
Price is important to me when I make a purchase decision of instant coffee.	0.823				
I will not spend too much money on brewed coffee because it is expensive.	0.814				
Instant coffee is normally cheaper than drinking in coffee shops or restaurants.	0.811				

Dimensions (factors)	Sub- Variables Loading				
Factor 1: Price	F1	F2	F3	F4	F5
I prefer instant coffee because the price is reasonable.	0.800				
I consume instant coffee because it is worth my money	0.692				
Although the price of instant coffee differs from one brand to the other, it gives me choices that suit my taste preference.	0.672				
I think the price of instant coffee is cheaper than having it in the restaurant, with the same great taste.	0.616				
Sub-total variance	**29.009**				
Factor 2: Convenience					
I can prepare instant coffee faster.		0.860			
In my opinion, instant coffee can be prepared easily and simply.		0.815			
In my opinion, drinking instant coffee can help me save time.		0.756			
Busy lifestyle makes me purchase instant coffee due to it being easy to prepare.		0.751			

Dimensions (factors)	Sub- Variables Loading				
Factor 1: Price	F1	F2	F3	F4	F5
Instant coffee is easily available in shops and supermarkets.		0.711			
Sub-total variance		**12.398**			
Factor 3: Product attributes					
I prefer to drink instant coffee since it has a good taste which is to my liking.			0.781		
I drink instant coffee because it makes me feel fresh.			0.752		
In my opinion, instant coffee has the right mix of ingredients that makes it tasteful.			0.742		
I prefer instant coffee because it tastes and smells good.			0.695		
Based on my previous purchasing experience, I believe that the quality of the instant coffee is good.			0.617		
Sub-total variance			**11.853**		
Factor 4: Influence by others					
My family normally serves instant coffee whenever I visit them.				0.808	

Dimensions (factors)	Sub- Variables Loading				
Factor 1: Price	F1	F2	F3	F4	F5
My friends normally order instant coffee whenever we go out for a coffee drink.				0.803	
My friends will normally bring instant coffee along whenever we go outstation together.				0.785	
Instant coffee is very common in my social circle.				0.676	
Sub-total variance				**6.730**	
Factor 5: Promotion					
The most advertised brands of instant coffee seem to influence me to purchase it.					0.797
Promotion of instant coffee encourages me to consume instant coffee.					0.776
I always pay attention to advertisements for instant coffee sales.					0.749
Promotion is a powerful tool to attract my intention to purchase instant coffee.					0.619
Sub-total variance					**4.835**
Total Variance Explain	**64.83**				

The reliability test in Table 8 was used to test the internal reliability of the Likert Scale questions stated in the questionnaire. In this analysis, the alpha coefficient values range from 0 to 1. The higher the score, the more reliable is the generated factor. The internal reliability test shows that the reliability test for: price factor is 0.892 with 7 of its sub-variables; convenience factor is 0.861, with 6 of its sub-variables; product factor is 0.842, with 6 of its sub-variables; influenced by others factor is 0.866, with 4 of its sub-variables;promotion factor is 0.825 with 4 of its sub-variables. All these factors and sub-variables are significant to identify the consumers' preference towards instant coffee as all the factors' Cronbach's Alpha values are more than 0.6 and alpha coefficient values above 0.6 are considered reliable and acceptable.

Table 8. Internal Reliability Analysis on factors that may influence consumer's preference towards instant coffee

Factor	Items	Cronbach's alpha
1. Price	7	0.892
2. Convenience	5	0.861
3. Product	5	0.842
4. Influence by others	4	0.866
5. Promotion	4	0.825

Binary logistic regression attempted to predict the extent to which determinants could possibly influence on the relationship between coffee drinkers' preference for instant and other types of coffees, demographic profile and dimension of underlined preference for coffee. The principal component analysis was applied to determine factors for the model. Result of the estimated binary logistic regression is shown in Table 10. In order to see the relationship between demographic profile of the respondents and coffee preference, Model 1, which is based on the demographic factors, shows there are 7 of the variables in the estimation, 5 of these variables are statistically significant such as age, marital status, education, income and occupation of the respondents at 1% and 5% levels. Although the age and income of the respondents were the variable holding 0.01 significance level with a positive sign, both of Exp (B) and B were nearly 1.0 and 0, thus, there is no effect of that variable on the outcome (Seltman, 2009). In terms of marital status, single or unmarried coffee drinkers are 3.598 times more likely to prefer instant coffee than married coffee drinkers. Education and occupation[1] indicate that holding higher education background and being students have played an important role on choosing instant coffee as more preferred choice for coffee. In model 2 where the factor loading scores extracted in factor analysis as independent variables are specifically focused to look at the relationship between the five

dimensions of underlined coffee drinkers' preference and coffee preference. In line with Krishnakumar and Chan-Halbrendt (2010) and Primadani et al. (2012) discussed, the respondents purchasing behavior and preference to consume instant coffee are influenced by price, convenience and influence by others in the social circle of the drinkers. Although price does not have effect on consumer preference with Exp(B) close to 1.0, convenience and influence by smaller social circle of the drinkers have positive influence on consumer preference in choosing instant coffee.

Table 10. Binary logistic regression analysis for estimating consumers' preference of instant and other types of coffee.

	B	S.E.	Wald	df	Exp(B)	Sig.	
Model 1: Demographic profile							
Constant	-4.240	0.748	32.145	1	0.014	0.000	***
Gender	0.254	0.293	0.750	1	1.289	0.386	
Age	0.085	0.018	21.734	1	1.089	0.000	***
Marital status	1.280	0.420	9.313	1	3.598	0.002	***
Income	0.001	0.000	17.582	1	1.001	0.000	***
Education	0.636	0.337	3.553	1	1.889	0.059	*
Occupation[1]	1.160	0.528	4.828	1	3.189	0.028	**
Occupation[2]	0.244	0.509	0.231	1	1.277	0.631	
Model 2: Dimension of coffee preference							
Constant	0.656	0.108	37.005	1	1.927	0.000	***
Factor1. Price	0.281	0.107	6.947	1	1.064	0.008	***
Factor2. Convenience	0.252	0.110	5.259	1	1.415	0.022	***
Factor3. Product attribute	-0.076	0.110	0.469	1	0.872	0.494	
Factor4. Influence by others	0.361	0.110	10.759	1	1.257	0.001	***
Factor5. Promotion	0.042	0.104	0.166	1	2.454	0.684	

Total percentage of the predicted variable is 84.1 in Model 1 and 69.3 in Model 2.

5. Conclusions

A consumer's survey shows that Malaysians do like drinking coffee in any mode such as instant and other types of coffee and they do so at home, work and café outlets. This study found that 85.4 % of the respondents consumed coffee, while 14.6% of the respondents do not consume coffee due to their own reasons. The results also found that 39.8% of the respondents consume coffee every day and 25.3% of the respondents consume coffee four times daily. Furthermore, 48.2% of the respondents like to consume coffee in their homes.

Among 427 respondents who like drinking coffee, several demographic profile factors except age plays important role on coffee preference. More specifically, marital status, education, income, occupation and education of the respondents are determinants on preference of instant coffee preference. Thus, a student, single and higher in education prefers instant coffee more due to its affordability and readiness to prepare and consume. Looking at consumers' instant coffee preference more closely, the dimensions of coffee preference indicate that the respondents pay attention to price, convenience, product quality, influence by others and promotion into consideration in their preferences of consuming instant coffee. At this point, this study could identify the Malaysian consumer's instant coffee preferences. Manufacturers, marketers and retailers could have better picture to understand consumer preference and reasons behind it.

Conflicts of Interest: The authors declare that they have no competing interests

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