

Factors influencing purchase intention of packaged food among adults in Klang Valley, Malaysia

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Abstract

Internal and external factors can influence individual interpretation and selection of packaged food. This paper aims to determine factors influencing consumers' purchase intention of packaged food (product taste, packaging, ingredients, nutritional value, price, brand, Halal label, advertisement, country of origin, and promotional scheme) among adults in Klang Valley, Malaysia. A total of 300 respondents participated in the online questionnaire survey through the convenience sampling method. Descriptive statistical and factor analyses were used to examine the data and determine the factors' rank order. Data showed individual habits, attitudes, perceptions, and socio-demographic factors (gender, age, education level, household income, and marital status) affect a consumer's purchase intention. The majority of consumers of packaged food were employed (76.7%). Consumers are drawn to packaged food because it is convenient (42.8%) and delectable (31.1%). The main findings of this study demonstrate that the selected factors have been grouped into four primary categories: sales deriving factor (23.8%), informational factor (14.9%), taste-related factor (12.2%), and quality assurance factor (10.5%). This research may aid in providing consumer insights that benefit food manufacturers or marketers in the efforts to create or improve packaged food products per consumers' preferences.

Keywords:

Packaged food, Consumer behavior, Purchase intention, Influencing factors, Klang Valley, Malaysia.

1 Introduction

Packaged food can be defined as processed food wrapped with packaging that includes convenient, ready-to-eat, and frozen food. There has been an increase in demand for more wholesome foods with extended shelf lives for immediate consumption (Ahari and Soufiani, 2021). According to Yu et al., (2020), packaged food such as fried rice, bread, crackers, and energy bars are highly preferred. The packaged food market in the Asia-Pacific area is predicted to experience accelerated expansion because of the growing consumer awareness and subsequent habituation with packaged food. The shift in traditional culture and cuisine, self-regulation, migration, the post-industrial urban environment, and women's participation in paid work is linked to the rising demand for packaged food products (Kumar et al., 2022).

Malaysia experienced significant urbanization, and the main cities in Klang Valley are undergoing rapid industrialization. Klang Valley is a metropolitan area in Selangor located in Malaysia's federal territory, Kuala Lumpur, home to roughly 8 million people as of 2020. It is becoming more urban due to the rising population density. Malaysia's highly advanced and sophisticated food and beverage industry is stocked with domestic and foreign products (FIT, 2020). As lifestyles shifted, city dwellers began to prefer ready-made frozen food. The Malaysian Investment Development Authority (MIDA) (2021) projects that the frozen food market in Malaysia will expand at a compound annual growth rate (CAGR) of more than 7% in the upcoming years.

In exploration, many factors influence consumer purchase decisions of packaged food. In a study on understanding the purchase intention of ready-to-eat food among Malaysian urbanites, Baskaran et al., (2017) proposed a conceptual framework that links extrinsic factors, purchase intention, and nutritional information interest. Particularly, health issues have increased the significance of nutritional information and made it a crucial factor in purchasing decisions. Besides, in an analysis of the behavior of Malaysian consumers regarding the export of food products, Lee and Lee (2020) concluded that Malaysian consumers exhibited a high level of trust and confidence in halal-certified products. This represents the cultural condition of Malaysia, where 61% of the population is Muslim.

In today's competitive food markets, it is imperative to comprehend the relative significance of development attributes that influence consumer food selections at the point of sale, given the rise in demand for packaged food products. This is an intriguing topic to be explored and discovered, focusing on consumers in Klang Valley as one of the largest areas with rising household disposable income. In addition, there are yet no definitive findings concerning Malaysian consumers' purchase intention of packaged food (Baskaran et al., 2017). In this sense, this research evaluated the influencing factor of purchase intention of packaged food among adults in the urban territory of Klang Valley. This study may shed light on the habits and viewpoints on consuming packaged food products, mainly among adults in Klang Valley, Malaysia.

2 Literature Review

2.1 Packaged food

Packaged food refers to food that has been completely wrapped in impermeable or permeable material to avoid direct contact with the environment (Garba, 2022). Packaged foods such as frozen, shelf-stable, and ready-to-eat are produced commercially. Food items, including pasta, frozen vegetables, peanut butter, nuts, canned beans, and many more, are examples of packaged food products. Malaysians are looking for foods and drinks that fit their lifestyle. The ease and convenience in preparation, consumption, and handling, especially for urban residents led to the development of packaged food (Basurra et al., 2021).

As more Malaysians relocate to metropolitan areas like the Klang Valley, there will be a rise in the demand for packaged food items. This tendency will continue to be led by young adults who have relocated to cities searching for better jobs and educational opportunities (Lun et al., 2021). The faster-paced city lifestyle will govern this group's consumption habits. The trend of grabbing quick meals while working is becoming more common due to demanding work schedules, especially among the younger population. Thus, the preference for a ready meal, frozen and canned packaged foods will increase as a quick substitute for homemade food or can be used as a base for more complicated meals (FIT, 2020).

Moreover, Malaysians are becoming more mindful of the nutrition, sustainability, and experience of their food. Thus, consumers favor healthier food choices that are ready to eat and take less time to prepare to improve their health and immunity (Market Analysis Report, 2022). The demand for organic and healthy foods, such as low-calorie and fats, sugar-free, less preservatives, herbal, plant-based, and malnutrition products, has increased because of consumer behavior changes and rising income levels (FIT, 2020). This inspired businesses and manufacturing facilities to speed up their production lines and produce nutritious food products. These situations will stimulate competition to sell similar types of food products. Therefore, it is exciting to investigate and learn more about consumer purchasing intentions for packaged food, emphasizing consumers in the Klang Valley.

2.2 Consumer behavior

Consumers search for a need, buy it, and discard it in the consumption process (Mehta et al., 2020). No two people are alike since everyone is influenced by many internal and external factors that shape consumer behavior. Numerous authors have mainly focused on the analysis of consumer behavior. The behaviorist approach, which Watson first reported in his study in the 1920s, is one of the oldest methodologies. Watson's study aims to demonstrate how consumer behavior is acquired throughout life. According to Sostar and Ristanovic (2023), a complex interaction between technological, economic, social, cultural, environmental, and health and safety variables affects consumer behavior daily.

Valaskova et al., (2015) described consumer buying behavior as an essential and constant decision-making process that consists of three groups. The first group is psychically based, which relates to the psyche and consumer behavior. The second group is the sociological approach, which devotes the consumer's reactions to various scenarios. The third group is the economic approach based on a basic understanding of microeconomics in which consumers specify their needs. The consumer interests are then traded on the market subsequently.

Modern consumers often require assistance in selecting products and identifying specific components due to the free market and the quantity of food products that satisfy both basic and luxurious desires. Producers and distributors should consider the characteristics of the modern consumer when providing food at the point of sale. This consumer exhibits increased interest and concern for food safety, growing awareness of the connection between food and nutrition and health and general welfare, and growing demand for disposable and convenient food that is simple to prepare for consumption. Therefore, businesses in the food industry should pay close attention to social trends that support the industry and lead to various food supplies.

2.3 Factors influencing consumer buying behavior

Owing to the complexity of the decision-making process when choosing food, different studies' proposed variables and classifications varied. Nonetheless, the elements influencing dietary decisions can be broadly classified into three groups. The first category is food features including information and packaging, as well as intrinsic qualities (color and scent) (Wang et al., 2019). The second category is individual differences including biological variables (hunger, appetite, and taste), physical factors (access, culinary abilities, and time), psychological factors (mood and stress), cognitive factors (attitudes or preferences, beliefs, and knowledge), and social factors (family and peers) (Rozin, 2015). The last category is society characteristics including culture, financial factors (income and price), and legislation (Rayner and Lang, 2015).

According to Durmaz (2014), the main psychological factors influencing consumer purchasing behavior include motivation, experiential or conceptual learning, beliefs, and attitudes. Other general factors that are suggested to impact consumer purchase behavior include customer satisfaction, quality, trust, expectation, brand and customer loyalty, price sensitivity, and experience (Petruzzellis et al., 2014). In addition, Ferrão et al., (2019) reported sociodemographic elements, motivations and attitudes, religious traits, cultural and social background, regional diversity, and psychographics are among the most important aspects that affect consumer purchasing behavior.

Besides, Leng et al., (2017) reported several factors influenced people's choice of food, including dietary components (appetizing foods), physiological mechanisms (hunger and satiety or motivation and reward), cognitive-affective factors (perceived stress, health attitudes, and depression), various cultural and social pressures. Castro et al., (2018) reported product factors (branding, nutrition labeling, food sampling), pricing and price promotion factors, customer decision-making factors (customers' implicit

beliefs on the correlation between taste and healthfulness), and store environment factors (smaller aisles) impact consumers choice in food retail settings.

After evaluating many academic studies, a theoretical framework developed consists of attitude as the primary component and three key variables. Satisfied consumers have a favorable attitude toward packaged food products, whereas those who are dissatisfied have a negative attitude toward purchase intention. The three variables that affect consumer attitudes include extrinsic factors including product-related attributes (price, brand, Halal label, advertisement, country of origin, and promotional scheme), demographic factors (gender, age, ethnicity, education level, employment, household income, and marital status), and intrinsic factors including physical characteristics of the product (taste, packaging, ingredients, and nutrition value). The theoretical framework is illustrated in Figure 1.

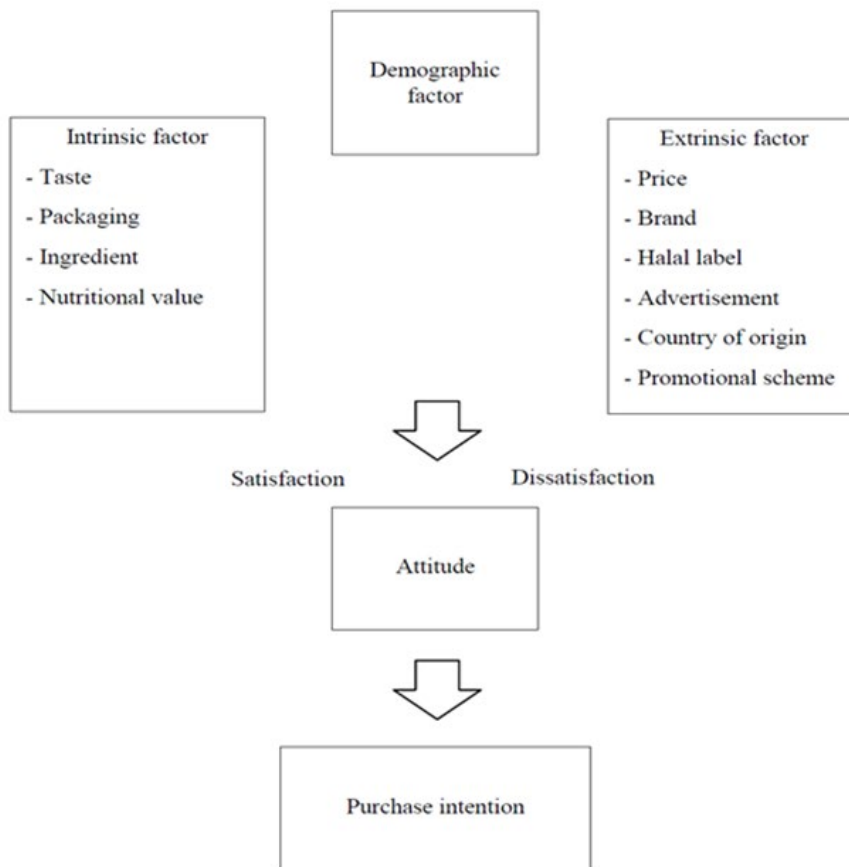


Figure 1: Theoretical framework

3 Methodology

3.1 Research approach

This study was conducted after obtaining ethics approval from the Institutional Ethics Committee, UCSI University, Kuala Lumpur (Reference code: IEC-2021-FAS-029). The deductive approach was applied, where pre-existing information and theories were used to explain particular phenomena. This study aimed to determine the factors that influence customers' inclinations to buy packaged food products based on the theoretical framework. Both qualitative and quantitative data were utilized to measure and understand consumer behavior.

3.2 Sampling design

Convenience sampling methods were used due to the cost-effective, easy conduct, and simple way to achieve fundamental study-related data compared to other sampling methods (Sathiaseelan et al., 2019; Sen et al., 2019). The respondents were approached at supermarkets and restaurants and were asked to answer and share the online questionnaires with relatives or friends. The most packaged food users are mainly students and workers (Basurra et al., 2021). Thus, the primary interest of the sample was the adult population above 20 years old from different regional areas of Klang Valley. Following the computation of the sample size, the questionnaires were distributed to 385 respondents. The formula employed a 95% confidence level, a 0.5 standard deviation, and a $\pm 5\%$ confidence interval (margin of error).

$$\text{Sample size} = \frac{(z \text{ score})^2 \times \text{StdDev} \times (1 - \text{StdDev})}{(\text{Confidence interval})^2}$$

$$\text{Sample size} = \frac{(1.96)^2 \times 0.5 \times (0.5)}{(0.05)^2}$$

$$\text{Sample size} = \frac{0.9604}{0.0025}$$

$$\text{Sample size} = 384.16$$

Hence, a 385-sample size was used.

3.3 Questionnaire design

This study created questionnaires based on earlier research (Nguyen and Gizaw, 2014; Basurra et al., 2021). Multiple languages, including Malay and English, were used in the questionnaires. Every participant is given the same online questionnaires to complete to guarantee the reliability and accuracy of the results. Google Forms was used to design the surveys, which were then sent via Facebook, WhatsApp, and email because of cost-effectiveness, flexibility, and quick completion times.

The final questionnaires, composed of 19 questions, were divided into three parts. In Part A (Demographic information: Q1-Q7), general questions on socio-demographics

were asked using close-ended questions to assess the demographic profile of the respondents. Nominal and ordinal scales determined the data. Part B (Purchase and consumption practice: Q8-Q14) consists of questions on consumer practice on purchasing and consuming packaged food products to examine the consumer habits on packaged food. Lastly, in Part C (Attitude and perception: Q15-Q19), the questions were designed from the related theories using the 5-point Likert scale to analyze the most influencing factor of consumer purchase intention (Saha et al., 2020). Informed consent was sought from all participants. The assurance of anonymity and confidentiality was maintained throughout the study.

3.4 Pilot testing

A pilot test was performed with 20 respondents, as Hill (1998) suggested, to check the validity of the survey instrument and examine the feasibility and suitability of this study. Based on the results, the questionnaires were modified.

3.5 Data collection

This study was furnished using both primary and secondary data. A predesigned, systematic, and non-intrusive questionnaire was used to gather primary data on attitude-related factors, such as habit, attitude, perception, and desire to purchase packaged food products. To save time, secondary data were collected from previous research, journals, and scientific articles online to build the theoretical framework and survey questionnaires. The keywords used on the search engines for data collection are packaged food, purchase intention, consumer behavior, and Malaysia.

3.6 Data analysis

Data were analyzed using IBM SPSS Statistics 28. Socio-demographic data and consumption habits were analyzed by frequency and percentage mean. Besides, descriptive statistics were used to describe the data. The variability of the observed and correlated variables was described using factor analysis. Factor analysis refers to several techniques to examine connections between variables, creating a few fictitious variables (Saha et al., 2020).

Cronbach's alpha reliability statistics were used to measure dependability for determining internal consistency. Next, Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity were used to determine sampling adequacy and the study's relevance by examining the responses' appropriateness and the data set's validity. Furthermore, the extraction method used principal component analysis, analyzed by correlation matrix, and extracted based on an Eigenvalue greater than 1. The data was displayed using a Scree plot, and the table explains the total variance. The rotation method used Varimax with Kaiser Normalization, and the rotated component matrix table was used to display the data (Saha et al., 2020).

4 Findings

4.1 Survey data

In this study, 300 out of 385 respondents were successfully surveyed, yielding a response rate of 77.9%. There were more female respondents (63.0%) in this survey than male respondents (37.0%). The respondents ranged in age from 20 to 30 years old (63.7%), 31 to 40 years old (25.3%), 41 to 50 years old (7.7%) and above 50 years old (3.3%). Most of the respondents were Malay (85.0%), followed by Chinese (7.7%) and Indian (7.3%). The most common academic degree held by respondents was a bachelor's degree (58.0%), followed by a postgraduate degree (16.7%), a diploma (14.3%), and a high school graduate (11.0%). This education level data shows a steady rise in the educated population.

Data on employment status showed the employment rate is the highest at 76.7%, and the unemployment rate is 23.3%, encompassing students (14.3%) and housewives (9.0%), indicating the rising employment rate of younger women. Only 26.0% of respondents reported having a household income of less than RM2,000, while most had an income of RM2,000 to RM4,000 (50.7%). Malaysia is considered an upper-middle-class country, with over 60% of the population being middle-income. The household's discretionary income increases with higher employment and educational levels (Turcinkovaa and Stavkovab, 2012). Half of the respondents were married (53.0%), followed by single status (44.0%) and divorced (3.0%).

Consumer practice in purchasing and consuming packaged food was successfully accessed. Most respondents consumed packaged food more than once daily (51.3%) and three to four times weekly (58.0%). This indicates that consumers purchase packaged food for a full meal or eating out. Previous research reported that students and employees in Kuala Lumpur bought ready-to-eat foods for full meals and consumed ready-to-eat food two to four times a week (Basurra et al., 2021). Moreover, most respondents shop for packaged food one to two times (62.2%) a week. According to Hassan et al., (2015), although Malaysians do not have a particular favorite day or time to shop, most prefer to shop on the weekends and evenings.

The majority of the respondents shop for packaged foods at the supermarkets (59.7%), and less to shop at the grocery stores (10.0%). In Klang Valley, hypermarkets and big-format supermarkets dominate the retail landscape, serving as the primary outlet for 50% to 60% of urban home buyers' packaged food (GAIN, 2017). Consumers in this expanding urban environment desire comfort, convenience, and good value while purchasing; hypermarkets and supermarkets meet those needs.

Most respondents feel that packaged food sold on the market is safe (43.6%) and valued for the money (50.4%). This indicates that consumers have trust in packaged food safety. Nevertheless, data shows that most respondents prefer real food over packaged food (55%), and only 2.5% of respondents disagreed with the statements. This finding may indicate that consumers perceive packaged food as less healthy than real food. Fuhrman (2018), reported that consumers thought less processed food products were

healthier and had fewer calories compared to more processed food products. In terms of satisfaction, most of the respondents remained neutral (52.1%).

Furthermore, only 32.8% of the respondents were willing to spend on attractive packaging, and most remained neutral (42.0%). A Journal of Psychology and Marketing reported that eye-catching packaging stimulates brain activity linked to rewards, whereas ugly packaging arouses negative feelings (Weiss, 2019). Most respondents were willing to pay more for eco-friendly packaging (52.0%), 25.2% remained neutral, and 8.4% disagreed. Rajendran and Wahab (2019) reported that Malaysians have a moral and social duty to safeguard the environment, but only some take these obligations seriously. Malaysians still need to familiarize themselves with the new trend of fusing packaging with green to save the environment.

Most consumers will spend more for better taste (90.7%) and ingredients (88.2). A study by research firm IGD and Food Industry Asia (FIA) (2019) reported that almost all Malaysians (99%) are interested in eating healthily and actively trying to change their consumption patterns. Besides, Malaysian consumers accepted healthier product reformulations, and the majority agreed that food and beverage businesses should alter the recipes to produce more nutritional products as long as the flavor is maintained or improved.

4.2 Factor analysis

Previous studies have discovered ten influencing factors persuading consumers to buy packaged food. These determining factors include packaging, ingredients, taste, country of origin, brand, nutritional value, advertisement, price, and promotional scheme. Considering the evolution and invention of Halal products in Malaysia's population, the Halal label was considered one of the influencing factors. Descriptive statistics showed that consumers' responses to taste (M=4.69, SD=0.83) and brand (M=4.29, SD=0.84) were greater than other factors. In contrast, the mean value on advertisement (M=3.26, SD=0.89) and packaging (M=3.37, SD=1.40) were less valuable than on all other factors. Table 1 tabulates the descriptive statistics data.

Table 1: Descriptive statistics

Variables	N	Min	Max	Mean	Std. Deviation
Halal label	300	1	5	4.03	1.012
Packaging	300	1	5	3.37	1.401
Ingredients	300	1	5	3.73	1.212
Taste	300	1	5	4.69	0.833
Country of origin	300	1	5	3.97	1.021
Brand	300	1	5	4.29	0.845
Nutritional value	300	1	5	3.99	0.979
Advertisement	300	1	5	3.26	0.897
Price	300	1	5	3.75	0.885
Promotional Scheme	300	1	5	3.76	0.902
Valid N (listwise)	300				

The Cronbach's alpha coefficient for the 10 items was identified. In general, the guideline states that 0.6 to 0.7 is the acceptable level of reliability. Therefore, the score of 0.647 appears to be in the range of the permissible level (Ursachi, 2015). The result of Cronbach's alpha is tabulated in Table 2.

Table 2: Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.647	0.638	10

Kaiser-Meyer-Olkin's (KMO) measure of sampling adequacy was 0.65 (Barlett test of sphericity, $p < 0.001$). According to Cagley and Kress (2015), KMO scores range from 0.00 to 1.00, thus 0.6 seems to be a generally accepted index across all data sets. It is ineligible for factor analysis if the score is less than 0.5. Furthermore, the data suggest that the sample is 65.0% error-free and that the remaining 35.0% of the sample may include some error. The results of the KMO and Bartlett tests indicate continuing factor analysis of the data.

Bartlett's test of sphericity makes it clear that the variables have a significant correlation with one another. The chi-square test result (156.500 with a significance level of 0.000) implies the rejection of the null hypothesis which indicates a significant difference between the factors affecting selection decisions. This indicates that the associated variables are ideal for structure recognition and qualified for factor analysis (Saha et al., 2020). Table 3 presents the results of KMO and Bartlett's Test.

Table 3: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.650
Bartlett's Test of Sphericity	Approx. Chi-Square	156.500
	df	45
	Sig.	0.000

Communality can be defined as the state or condition of being communal. The variance that is shared or common by other statements is referred to as each statement's communality (Saha et al., 2020). Most consumers were persuaded to buy packaged food because it was Halal (86.0%). About 70.0% of those surveyed believed that the product's taste influenced their buying the packaged food. About 69.4% of respondents thought price was the primary consideration when purchasing packaged food. Nutritional content, marketing strategy, ingredients, place of origin, advertisements, brand, and packaging also influence consumers' decisions to purchase packaged food. The communality of each factor is 1.0, as shown in Table 4.

Table 4: Communalities

Variables	Initial	Extraction	Percentage %
Halal label	1.000	0.860	86.0%
Packaging	1.000	0.396	39.6%
Ingredients	1.000	0.585	58.5%
Taste	1.000	0.700	70.0%
Country of origin	1.000	0.577	57.7%
Brand	1.000	0.567	56.7%
Nutritional value	1.000	0.601	60.1%
Advertisement	1.000	0.571	57.1%
Price	1.000	0.694	69.4%
Promotional Scheme	1.000	0.600	60.0%

Extraction Method: Principal Component Analysis

The Total Variance Explained table estimates the number of significant factors. Only the extracted value appears to be significant for the data interpretation. The factors were arranged based on the factors with the largest loadings of explained variation (Saha et al., 2020). The total variance explained matrix additionally assesses the framework's common factor bias. The result shows that the loading of the variance appears to be 23.844% for factor 1, 14.906% for factor 2, 12.228% for factor 3, and 10.544% for factor 4. Therefore, it is clear that no single element has a variance loading of more than 50%, and the variance loadings can be said to be devoid of common factor bias. Total Variance Explained is tabulated in Table 5.

Table 5: Total variance explained

COM P	Initial Eigenvalue			Extraction Sums of Squared Loadings			Rotation Sum of Squared Loadings		
	TOT	% of Var	Cum %	TOT	% of Var	Cum %	TOT	% of Var	Cum %
1	2.38	23.844	23.844	2.38	23.844	23.844	2.24	22.480	22.480
	4			4			8		
2	1.49	14.906	38.749	1.49	14.906	38.749	1.56	15.681	38.160
	1			1			8		
3	1.22	12.228	50.977	1.22	12.228	50.977	1.20	12.045	50.206
	3			3			5		
4	1.05	10.544	61.521	1.05	10.544	61.521	1.13	11.315	61.521
	4			4			2		
5	0.89	8.962	70.483						
	6								
6	0.82	8.243	78.725						
	4								
7	0.67	6.779	85.504						
	8								
8	0.56	5.668	91.172						
	7								
9	0.46	4.609	95.781						
	1								

10	0.42	4.219	100.00
	2		

Extraction Method: Principal Component Analysis

- a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance

The Extraction Sums of Squared Loadings are similar to the Initial Eigenvalues except for not showing factors with eigenvalues below 1. The findings clearly show that rotation loading was presented after Eigenvalues and variance. After rotation, the eigenvalues and variance are displayed in the Rotation Sums of Squared Loadings. The total variance explained result indicates that the ten components had been reduced to four variables which appear to have initial Eigenvalues greater than 1, and these four variables account for 61.521% of the total variance.

A scree plot has been used to count the number of important components of the study. It reveals that the values of the first four components are greater than one. In comparison, the values of the remaining components, eigenvalues 5 to 10, are less than the significant level one, and it displays nearly a flat line, indicating that these factors account for just a small amount of variation. The factor number-based eigenvalue is displayed in Figure 2.

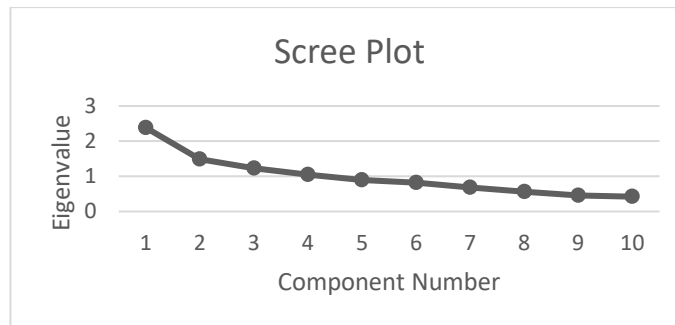


Figure 2: Scree plot

Based on the component matrix, price, advertisement, promotional scheme, and brand are included in Component 1. Component 2 comprises the country of origin, nutritional value, and packaging of the product. The third component comprises the product's taste and ingredients, and lastly, component 4 includes only the Halal label. The pattern matrix identifies four extracted component factors. The rotated component matrix is presented in Table 6.

Table 6: Rotated component matrix

Variables	Component			
	1	2	3	4
Price	0.831			
Advertisement	0.729			
Promotional scheme	0.685			
Brand	0.675			

Country of origin	0.728		
Nutritional value	0.710		
Packaging	0.595		
Taste		0.806	
Ingredients		0.668	
Halal label			0.926

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization
 a. Rotation converged in 5 iterations.

4.3 Discussion

Food consumption habits gradually shift from fresh, unprocessed, unbranded foods to processed, packaged, and branded foods. The socio-demographics and intrinsic and extrinsic attributes influence consumers' purchasing intentions for packaged food products. According to the sociodemographic analysis, most respondents (63%) were female, between the ages of 20 and 30 (63.7%), 50.7% had household incomes of more than RM2,000 monthly and 50.3% had married. In addition to these, 58.0% of all respondents had a graduate degree, and 76.7% were employed. Thus, female service members who have earned a degree with an income of at least RM2,000 monthly and have married make up most packaged food buyers in Klang Valley, Malaysia. Thus, it is evident that sociodemographic characteristics, such as age, gender, income, education level, marital status, and occupation, have an impact on the purchasing of packaged food.

Researchers have proven that consumers' decisions to buy food are typically influenced by age, gender, wage, and education (Nirmalraj, 2014; Singh and Verma, 2017). A crucial consideration is gender. Men often shop and then go; women prefer to shop despite deadlines. Most product decisions in most households are influenced by women. The purchasing habits of men and women may differ significantly as they have different needs in terms of lifestyle. When purchasing packaged food, age is also a crucial demographic aspect. People's requirements and buying habits alter as they become older. Younger people are expected to spend more on lifestyle expenses than older folks. Instead of eating as many high-energy items as young people do, older adults prefer to consume more low-energy foods like grains, vegetables, and fruits. Therefore, gender and age may be deciding factors in selecting packaged food.

The association between a person's food preferences, socioeconomic class, and level of education is one of the most intriguing topics. Educated and financially secure people typically want to enhance their standard of living. Compared to homes with the lowest level of education, educated households made much higher purchases of nutritious food. This study also demonstrated the biggest motivator for the adults in Klang Valley to purchase packaged food is convenience, which aligned with previous findings by Basurra et al., (2021) and Sen et al., (2019). The need for convenience has increased due to lifestyle changes. Convenience is a reflection of a customer's tendency

to minimize time and effort when preparing meals to support and alleviate hectic lives with lengthy workdays, heavy traffic, and plenty of free time. Besides, women also want to reduce the time spent preparing meals, hence desire convenient food. Therefore, changes in lifestyle, viewpoint, culture, and personality, as well as equal involvement of women in the workforce, are considered essential factors in purchasing packaged food.

This study discovered the role of intrinsic and extrinsic motivation factors towards purchase intention. The important finding from this research, the pattern matrix demonstrated the behavior of four extracted components 'factors'. Component 1 comprises price, advertisement, promotional scheme, and brand, which can be assessed as sales-driving factors. Sales driving factors help to stimulate the target market and improve sales by attracting consumers' attention through promotional schemes and advertisements. A recent study by Jallow and Dastane (2016) revealed that the Malaysian market has the most influence on free samples and price discounts. Customers are typically cost-conscious and frugal with their money (Goldsmith et al., 2014). However, this is not always the case, especially regarding food consumption. Packaged food buyers normally seek out the best deal. Consumers who shop on price are inconsistent and frequently move to products with cheaper prices (Hung et al., 2021). Some customers also believe that price is a sign of quality, and the cost of high-quality goods is exorbitant. Nonetheless, a more competitive price at an accessible price and improved product quality through product conformance can boost customer value (Razak et al., 2016). Hence, price influences consumer purchasing intentions.

Consumers are also inundated with various promotional offers from TV and social media advertising, word of mouth, free delivery, and many more. In this commercialized era, advertising is one of the most effective marketing tools for its effect on consumers. Advertisements help to strengthen brand names in consumers' minds and influence consumers' purchasing decisions. According to Foroudi (2019), major marketing efforts such as advertisements generate brand awareness. In this regard, customers' substantial brand knowledge leads to variance in purchasing patterns (Romaniuk et al., 2017). Furthermore, branding includes more than a name or logo to differentiate a product in the market and compete with rival items. Through identifying and differentiating quality and origin, branding is crucial to influencing consumers' loyalty and their choice of products (Sofi et al., 2018). The brand directly influences perceived quality since it communicates the product's level of quality. Additionally, it aids in boosting customer confidence and decreasing perceived risk, time, and effort required for searching or switching products. Hence, the advertisement makes customers more devoted and encourages positive purchasing behavior and this relationship grows stronger dependent on brand awareness.

Next, Component 2 comprises country of origin, nutritional value, and packaging, which can be categorized as informational factors. Informational factors stimulate consumers to purchase packaged food (Latiff et al., 2016). Information about a food product's country of origin is an important external information signal for consumers' perception and evaluation. According to Yunus and Rashid (2016), perceived quality is seen to be the factor that is most impacted when examining the impact of country of

origin on customer buying decisions. For Malaysian consumers, the provenance of food is typically linked to three categories: food that is Halal, food that has been produced in a way that safeguards worker welfare, and environmentally friendly food. Food origin information is another tool used by consumers to determine whether a product is worth the price. The assurance of food safety and pleasant flavor can also be obtained by looking at the country of origin (Chamhuri and Batt, 2013).

Nutritional value information is one of the critical ways for consumers to learn what is in the food, which enables consumers to make informed selections based on the product's healthful attributes. Few people read the nutritional information, but most tend to read more about the price, ingredients, and expiration dates. The Asian Food Information Centre (AFIC) discovered most consumers in China and Malaysia felt that all produced products should have nutrition information on their packaging. Petrescu et al., (2019) reported that customers who strongly value healthy and safe food alter their eating and nutrition habits due to their keen interest in packaging information. Besides, customers are drawn to a product's visual display of packaging, which persuades them to pick it up, investigate its uses, and decide whether it is worthwhile purchasing (Weiss, 2019). Packaging can be the selling point since it conveys a sense of quality and reflects the brand. Food marketers and manufacturers use packaging as a tactical tool for boosting the competitiveness of food products (Hassan et al., 2012). Hence, information such as the country of origin and nutritional value of packaged food packaging influenced consumer purchasing intention.

Next, Component 3 comprises taste and ingredients, which can be assessed as taste-related factors. Taste-related factors stimulate satisfaction and create customer loyalty by enabling repeated purchase behavior. According to studies by Forde and Graaf (2022), customers are most influenced by sensory qualities (smell, overall appearance, texture), palatability, and taste when selecting food products. Similar findings by Dana et al., (2021) demonstrated that the most important factors influencing food product purchases are taste, brand, and price. Besides, this study also demonstrated that Malaysians are willing to spend more on packaged food products with better ingredients and taste. This is similar to the findings of a previous survey; customers are more likely to pay a premium price to ensure that the food goods are of high quality (Ali and Ali 2020). Hence, product taste and ingredients positively influenced consumer purchasing intention.

Lastly, Component 4 consists of a Halal label, which can be termed a quality assurance factor. Zakaria et al., (2018) discovered a favorable association between consumer purchase intentions and perceived certification logo quality. Product certification such as Halal lets consumers know the product is safe and reliable. It is also a benchmark for product quality and safety. Malaysian society is multicultural, with Islam as the majority religion. There tends to be a high level of consumer awareness and interest in the halal status of food products with the conviction that consuming halal foods ensures a better and healthier way of life. According to Rezai et al., (2015), higher educated and religious consumers are more knowledgeable and motivated about a product with halal status. Additionally, Rezai et al., (2015) polled 400 non-Muslim Klang

Valley consumers to see what they thought about halal food options in the Malaysian food sector. The findings indicate that non-Muslim consumers are also aware of halal cuisine, halal principles, and the benefits of halal animal slaughter. Therefore, the degree of consumers' religiosity and trust positively influence consumer attitudes toward buying halal-labeled packaged food.

5 Conclusion

This study investigated the main variables adult consumers in Malaysia's Klang Valley considered when purchasing packaged food. The findings showed that respondents regularly bought or ate packaged food. Convenience was the main driving factor for respondents to purchase packaged food. Most respondents have a neutral attitude towards packaged food and believe that packaged food is affordable and valued for the money spent. In addition, most consumers were willing to spend more for packaged food with superior taste and components. Half the respondents were also inclined to spend more on more attractive, eco-friendly packaging products.

The Cronbach's alpha coefficient is 0.647, within an acceptable level of reliability. Besides, the extracted value from the KMO and Barlett's Test is 0.650, which is higher than the required value of 0.50 and demonstrates that the data set is appropriate for factor analysis. It is clear from the variance explained matrix that the ten components can be reduced to only four, accounting for 61.521% of the variance. Finally, according to the component matrix, four key elements affect the purchase intention of packaged food items in Klang Valley, Malaysia: sales-driving factors, including price, promotional schemes, advertisements, and brand; informational factors, including packaging, nutritional value, and country of origin; taste-related factors, include product taste and ingredients; and quality assurance factor include Halal label. This study may provide Malaysian food manufacturers and marketers with consumer insights to help create or produce products that appeal to consumers' preferences.

6 References

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