

# **THE PREVALENCE OF FAST FOOD CONSUMPTION AMONG UNDERGRADUATES: EVIDENCE FROM MALAYSIA**

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## **Abstract**

The fast-food industry has been growing rapidly since its first opening in Malaysia in 1980s. The trend of consuming fast food continues to grow at a rapid rate especially among students. Therefore, the purpose of this study is to investigate various key determinants of fast-food consumption among Malaysian undergraduates as they constitute a large percentage of fast-food consumers. A set of validated questionnaires was used in gathering data on the key determinants of fast-food consumption prevalence namely consumer behaviour, personal lifestyle, and product attributes. A quantitative investigation was conducted on the data using SPSS package. Few analyses namely Descriptive, Reliability and Multiple Regression were used. The Pearson Correlation indicates product attributes have a strong correlation while there is a moderate one for both consumer behaviour and personal lifestyle. Multiple Regression Analysis results highlight that personal lifestyle and product attributes are both positively significant while consumer behaviour, which positively affects fast food consumption among the Malaysian undergraduates, is not a significant determinant.

**Keywords:** Consumer Behavior, Fast Food, Product Attributes, Personal Lifestyle.

## **1. INTRODUCTION**

Consumption of fast food has become a global phenomenon. It is predicted that this trend will accelerate in the future. Malaysia is no exception. Eating out is a trend among Malaysians due to urbanisation, changing lifestyles, increasing household income as well as growing number of working mothers. Consequently, people spend more time working and less time preparing food at home. Thus, the rapid growth of fast-food industry has created a spectacular trend especially for young adults and including university students as it offers fast service, convenience, and inexpensive price. Apart from their economic preferences, students prefer fast food due to their hectic lifestyle and limited time, thus cooking is not an option even if they stay outside their hostel (Seo & Lee, 2011).

Additionally, students' consumption specially towards fast food consumption, undeniably, is also affected by interesting marketing strategies carried out by most fast-food companies. The most recent and effective fast-food marketing strategy rely heavily on technology to meet customer demand. Among them is by leveraging mobile marketing since the access to internet using mobile devices is increasingly becoming a common trend. The convenience of mobile shopping application enable consumer to view menu prior to arrival and check specials and earn rewards.

Based on the development and nature of fast foods consumption mentioned above, the aim of this study is to investigate the key determinants of fast-food consumption prevalence among UiTM students, as a representative of the Malaysian undergraduate students. Using multivariate statistical tools, this paper seeks to examine consumer behaviour, personal lifestyle and product attributes that affect the fast-food consumption of students. The organisation of the paper is as follows: section 1 is the introduction followed by section 2 that covers the literature review. Section 3 presents the theoretical framework and Section 4 describes the methodology used in this study and finally section 5 presents the finding while Section 6 is the conclusion.

## **2. LITERATURE REVIEW**

### **2.1 Prevalence of Fast-Food Consumption**

The desire for fast food among younger people has significantly increased each day due to the influence of western culture. Habib, Abu Dardak and Zakaria,(2011), who examined the trend and pattern of fast food consumption and the importance of numerous factors impacting Malaysian consumers' option of fast food, found that 84.5% of respondents purchased and consumed fast food, while 15.5% did not consume fast food as they preferred home-cooked food because of health and financial constraints.

Abdullah, Mokhtar, Bakar and Al-Kubaisy, (2014), investigated the intensity between fast food consumption characteristics and the prevalence of obesity among community members, discovered that 21.3% of respondent were obese and young Malays had higher fast food consumption compared to other ethnic. The results also showed that there was a correlation between age, ethnicity, number of children in a household, their general health and high intake of fast food. Similarly, Jasper, (2002), who investigated the determinants of fast food by using the USDA continued survey of food intake in the United States between year 1994 and 1998, found out similar results that the socio-economic variable including age, income, household size, working hours, and education, had a major impact on fast food consumption and household expenditure on fast food.

The growing number of fast-food young adult consumers also seems to be occurring in other parts of the world as fast-food restaurant has fulfilled the need for young people who face time and financial constraint. The fast-food restaurant and industry offered a relatively cheap product, strategic location, welcoming atmosphere, efficient staff, and delivery system (Untaru, Elena & Ispas, Ana,2013). Factors such as age of consumer mostly young age, level of income, busy lifestyle, quick service, hygiene and food safety offered by fast food had led Moroccan consumers to opt for fast food (Goubraim & Chakor, 2015).

Likewise, fast food had become a new craze and hence becoming more influential each day as Pakistani consumers warmly accepted them with open arms as discovered by Ismail (2016). His study was based on sample size of 50 university girls in Karachi, had found that 94% of the respondents consumed fast food. In addition, it was also noted that the most preferred meal was burger (44.7%) followed by pizza (19.1%) and sandwich (12.8%). Yardimci, Ozdogan, Ozcelik, and Surucuoglu, (2012) found about 43.8 % of the university student in Ankara went to fast food restaurants during the weekend. While India's fast food industry was getting adapted to Indian food requirement, it continued to grow especially in cities, as it was gaining acceptance primarily by Indian youngsters and had become a part of their daily lives (Goyal & Singh, 2007).

## 2.2 Consumer Behaviour

Consumer behaviour is the study of individuals and groups and all the activities associated with the purchase, use and disposal of goods and services, and how consumer attitudes and preferences affect buying behaviour. Delhi, (2016) examined consumer behaviour towards fast food chains prevailing in India found out that 32.2% respondents were willing to spend Rs. 200 to rs.400 per meal, and about 14.2% of respondents were willing to spend Rs.500 per meal. According to Vaida (2013), the main driving force in fast food intake apart from flavour, variety, brand, fast service, and availability, were exposure to advertisement and media influence. However, Imiru (2017) found that there were no significant relationships between packaging colour and packaging materials in the purchase decision.

Pratabaraj and Joe (2013) compared the impact of changes in the purchasing power on crossover segments between companies and multinational companies with fast food connections, concluded that fast food joints were visited by consumers of all income categories and therefore confirmed that income does not influence. Ismail, (2016) investigated the behaviour of consumers in selecting and consuming fast food in Pakistan, noted that most respondents were young, well literate and well off economically, and concluded that the socio-economic indicators, such as age, education, employment, income and the size of the family, were significant in determining the consumer behaviour. Additionally, results clearly showed, apart from maintaining prices at a level that most people could afford, good food taste and texture, the cooperative attitude of staff in fast food restaurants and, in particular, the time saving element were factors that motivated consumers to prefer fast food over home-cooked food. Increased mobile couponing in the fast-food industry had also increased the purchase of fast food by consumers (Banerjee & Yancey, 2010).

## 2.3 Personal Lifestyle

Lifestyle, which is defined as a sum of everyday life patterns that everyone voluntarily and deliberately applies throughout their everyday lives, reflects the values, the vision of life, the style of a person and the goal of life (Vyncke, 2002) and thus has a significant impact on consumer behaviour. Time constraints among student had changed their lifestyle from consuming a healthy meal or home-cooked meal to fast food meal so that it could fix with their hectic schedule. Bipasha and Goon, (2014) found that 54% of a private university student in

Bangladesh skipped their breakfast due to class commitment and lack of time as well as due to the variety of food offered by a fast-food outlet.

Generation Y is 'night owl' that contribute to lack of sleep which triggered late night craving, night time snacking and hence tend to consume fast food at the midnight (Ying, 2016). It was found that a student who slept less than 10 hours per day consumed soda more than a student that slept more than 10 hours per day (Franckle, et al., 2015). Stress lifestyle of the students also leads to consumption of fast food as consuming fast-food acts as one of mechanism to reduce stress. This was supported by Cvetovac and Hamar, (2012) who found that there was an important relationship between high stress and fast-food consumption among students at the University of Seattle. It was also noted that Posttraumatic stress disorder (PSTD) among young woman was associated with an increased frequency in consuming soda and fast food as well as unhealthy diet behaviours (Hirth, Rahman & Berenson, 2011).

#### 2.4 Product Attributes

Generally, there were numerous factors that contributed to the consumption of fast food among undergraduate students in Malaysia. Habib et al., (2011) found that safety, taste of food and fast preparation were three main factors influencing fast food consumption. This was further supported by Goubraim and Chakor, (2015), who noted hygiene and food safety were main attributes that increased demand of fast food consumption. Another study by Mat, Zulqernain, Azila, and Zaid, (2016), had discovered factors such as low price, hygiene, freshness, halalness, healthiness and quick service influenced the choice of fast food restaurant. With regard to halal status, the study by Mohayidin and Kamarulzaman, (2014), indicated around 38.98 percent of respondents believed that halal was far more crucial in the purchasing process than price and brand of the product, as halal was widely known to be hygienic and of good quality.

The other element that was found to influence the prevalence consumption of fast food was brand preferences. Based on the study by Delhi (2016), McDonald's was the most favoured fast-food brand in India. A similar finding was noted in Morocco by Goubraim and Chakor, (2015). In India, as noted by Goyal and Singh, (2009), Domino's was more preferred than Pizza Hut among youngsters. Meanwhile, in Malaysia, fried chicken and bread were the most consumed by students (Habib et al. 2011). Additionally, the finding also revealed that Kentucky Fried Chicken (KFC) was the most preferred fast-food brand.

### 3. THEORETICAL FRAMEWORK

A theoretical framework explains how the dependent variable is linked to the independent variables as shown by Figure 1. Three independent variables namely consumer behaviour (Habib et al, 2011 & Goyal and Singh, 2009), personal lifestyle (Ying, 2016) and product attributes (Habib et al, 2011 & Goyal and Singh, 2009) were chosen to explain the dependent variable, the prevalence of fast-food consumption among UiTM students.

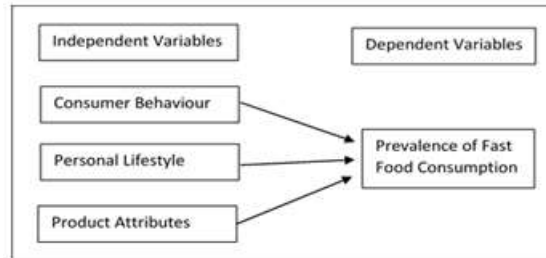


Figure 1: Theoretical Framework

#### 4. METHODOLOGY

Data on consumer behaviour, personal lifestyle and product attributes was collected using a set of validated questionnaires. A total of 145 undergraduate students from campuses of UiTM all over Malaysia participated in the survey. The questionnaire was in the Google form and was distributed through social media platforms such as WhatsApp and Twitter applications.

There are five (5) main sections in the questionnaire. Section A details the respondents demographic profile including gender, age, living arrangement, education level, monthly pocket money, source of income, ethnic and living area. Section B focuses on consumer behaviour towards fast food. While section C deals with the personal lifestyle followed by Section D that covers product attributes of fast food. Finally, Section E consists of questions on respondents' preference for fast food consumption. Items in all sections, except section A, were measured by a four-point Likert scale, ranges from 1 = strongly disagree to 4 = strongly agree. Respondents were asked to name their most preferred brand in Section D. The collected data was analysed using Statistical Package for Social Science (SPSS) version 20.0.

This exploratory study adopted descriptive and multiple regression analysis in assessing the key determinants that influence the prevalence of fast-food consumption among undergraduate students. Prior to the analysis, the validity and reliability of the questionnaire were conducted. The findings of the study will be useful to better understand the Malaysian undergraduate students eating habit particularly with regards to the fast-food consumption.

#### 5. FINDINGS

##### 5.1 Demographic Profile

The data was collected among UiTM students in Malaysia, by distributing questionnaires in Google form through social media. Based on Table 1, 95 (65.5%) of respondents are female and 50 (34.5%) are male. In term of age, majority of respondents are of the age between 21 years old to 23 years old with a total number of 74(51%). Those between 18 years old to 20 years old are 48 (33.1%) and above 24 years old as many as 23 (15.9%). It is found that 68 (46.9%) of respondents live with the family, while 56 (38.6%) at the hostel and 21 (14.5%) live with friends. Total number of respondents at degree level is 81 (55.9%), 53(36.6%) at diploma level and 11 (7.6%) at foundation level.

Table 1: Demographic profile of respondents

Demographic	Classification	Frequency	%	Demographic	Classification	Frequency	%
Gender	Female	95	65.5	Monthly Pocket Money	RM200	30	20.7
	Male	50	34.5		RM400	65	44.8
Age	18-20 years	48	33.1		RM600	39	26.9
	21-23 years	74	51.0		RM800	11	7.6
	Above 24 years	23	15.9	Income	Parents	57	39.9
	Living Situation	Hostel	56		38.6	Working	26
Family		68	46.9		Scholarship	18	12.4
Education Level	Friends	21	14.5		Education loan	44	30.3
	Foundation	11	7.6	Ethnic	Malay	133	91.7
	Diploma	53	36.6		Bumiputera	12	8.3
Education Level	Degree	81	55.6	Living Area	Urban	108	74.5
					Rural	37	25.5

With regards to source of income, as indicated by Table 1 above, 57 (39.9%) of respondents are dependent on parents for their source of income and 44 (30.3%) depend on their education loan. Other than that, only 26 (17.9%) work followed by 18 (12.4%) are scholarship students. Almost half of respondents with monthly pocket money of RM400 (44.8%) while others are RM600 (26.9%), RM200 (20.7%) and RM800 (7.6%) respectively. Additionally, it is noted that almost all respondents are Malay with 91.7% while only 8.3% of other races (Bumiputera). Majority of the respondents with the total of 108 (74.5%) live in the urban area while that of the rural area is 37 (25.5%).

## 5.2 Reliability Analysis

Table 2 shows the values of Cronbach's Alpha of all constructs that ranges from 0.805 to 0.871, which exceeds the acceptable cut-off point of 0.6 (Sekaran & Bougie, 2013). Hence all adopted variables for this study are internally consistent and of good reliability.

Table 2: Reliability Testing, Mean, Standard Deviation and Pearson Correlation

Factors	Cronbach Alpha	Items	Mean	Standard Deviation		Consumer behaviour	Personal lifestyle	Product attributes	Consumption pattern
Consumer behaviour	0.805	6	3.09	0.0627	Pearson Correlation	1			
Personal lifestyle	0.812	6	3.10	0.646		0.721**	1		
Product attributes	0.871	7	3.33	0.621		0.613**	0.644**	1	
Consumption pattern	0.859	6	3.25	0.661		0.599**	0.646**	0.714**	1

\*\*Correlation is significant at the 0.01 level (2-tailed)

The Pearson correlation results as in Table 2, indicates that product attributes has a strong positive effect (0.714) while both consumer behaviour and personal lifestyle has a moderate positive effect, (0.599) and (0.646) respectively, as specified by Guilford Rule of Thumb (1973).

### 5.3 Descriptive Analysis

#### 5.3.1 Consumer Behaviour

Table 3 showed that 34.5 % of the respondents strongly agree and 42.8% agree that they are willing to pay more than RM30 per meal of fast food. Regarding preferred time to eat, due to the busier lifestyle and lack of time to cook, most of respondents that is about 77.9%, prefer to consume fast food during dinner. Additionally, 79.3% agree that they consume fast food when they are stress and 82% of them use coupon when purchasing fast food. Majority of respondents as much as 80% prefer to purchase fast food meal through the drive thru. The data also reveals that 82.7% UiTM students prefer chicken than burgers. Clearly, respondents are highly inclined to consume fast food.

Table 3: Consumer Behavior

Items	Strongly Disagree	Disagree	Agree	Strongly Agree
I willing to pay RM 30 for a fast-food meal	6.9%	15.9%	42.8%	34.5%
I usually eat fast food for dinner	7.6%	14.5%	46.9%	31%
I eat fast food when I stressed	4.1%	16.6%	46.2%	33.1%
I use coupon/promotion when purchasing fast-food meal.	8.3%	9.7%	37.9%	44.1%
I usually purchase fast-food meal through drive thru.	7.6%	12.4%	42.1%	37.9%
I prefer chicken than a burger	9%	8.3%	44.8%	37.9%

#### 5.3.2 Personal Lifestyle

Regarding personal lifestyle, Table 4 shows as high as 86.2% of the respondents are aware that fast food is unhealthy, and thus contribute to obesity and health problems. Generally, about 82% agree that they have high level of stress as supported by previous studies that stress level is linked to higher fast-food consumption (Cvetovac & Hamar, 2012). It is also noted that around 68.9% agree that they practice inactive lifestyle. Additionally, about 73.8% of them being deprived of quality sleep and 30.3% of the respondents did not have time to prepare breakfast or lunch when attending college. Finally, as much as 87.6% of the respondents agree that they have less time to cook.

Table 4: Personal Lifestyle

Items	Strongly Disagree	Disagree	Agree	Strongly Agree
I am aware that fast food is unhealthy and contributes to obesity/health problem.	5.5%	8.3%	37.2%	49%
I experience a high stress level at home/college/work	5.5%	12.4%	43.4%	38.6%
I do not exercise/workout regularly	11.7%	19.3%	31.7%	37.2%
I sleep less than 7-8 hour per day.	11.7%	14.5%	42.8%	31%
I do not have time prepare my breakfast/lunch when I go to college.	7.6%	17.9%	44.1%	30.3%
I have less time to cook.	5.5%	6.9%	40.7%	46.9%

#### 5.3.3 Product Attributes

Based on Table 5, halal status, attractive packaging and taste are three noticeable factors that influence the purchase of fast food among UiTM students. The halal status is an important

product attributes due to the cultural and religious background of the respondents. The concept of halal signifies hygienic and of good quality (Mohayidin & Kamarulzaman, 2014).

As much as 57.9% strongly agree and 29.7% agree that halal status was a significant criterion when choosing fast food. Meanwhile, around 12.4% of the respondents do not give much regard about the halal status. The table also shows that 43.4% of respondents strongly agree and 40.7% agree that fast food outlet provide quality food. As much as 51% strongly agree that fast food is quick and easy to prepare, and 52.4% also strongly agree that they like the taste of fast food.

Table 5: Product attributes of fast food

Items	Strongly Disagree	Disagree	Agree	Strongly Agree
I believe that fast food outlet provides a quality food	9.7%	6.2%	40.7%	43.4%
They are quick and easy to prepare.	2.8%	10.3%	35.9%	51.0%
I like the taste	3.4%	9%	35.2%	52.4%
I concerned about their Halal status.	6.9%	5.5%	29.7%	57.9%
Attractive packaging.	4.8%	6.9%	34.5%	53.8%
I believe that the food is fresh.	5.5%	7.6%	36.6%	50.3%
They provide a variety of food.	2.8%	8.3%	38.6%	50.3%

Another attribute that being regarded as important is the attractiveness of the packaging where a total of 88.3% of the respondents generally agree that is the case. Finally, 50.3% strongly agreed that both freshness and variety of food provided attracted them to buy the fast food.

### 5.3.4 Prevalence of Fast-Food Consumption

Based on Table 6, as much as 61.5% of respondents strongly agree and 32.8% agree that they like fast food. Majority of them which is around 90.4% consume fast food at least 3-4 times a month. The respondents generally consider fast food as cheap is as reflected by 43.6% strongly agree and 46.7% agreed that it is so. Around 59.7% of respondents strongly agree while 32.8% agree that brand also play a role in their buying of fast food. The closeness of the fast-food outlet to their campus is yet another reason for them to consume fast food as overall being agreed upon by 93% of them. Finally, as high as 95% of respondents agree that convenient is another significant factor that make them go for fast food as they lead a hectic lifestyle.

Table 6: Prevalence of Fast-Food Consumption

Items	Strongly disagree	Disagree	Agree	Strongly agree
Do you like a fast-food meal?	2.74%	2.96%	32.8%	61.5%
I usually eat fast food 3-4 times a month.	1.3%	8.24%	40.9%	49.5%
I purchase fast-food because they are cheap.	1.8%	8%	46.7%	43.6%
I eat fast-food because I like the brand.	1.7%	5.9%	32.8%	59.7%
The fast-food outlet is near to my campus	2.1%	4.99%	28.1%	64.9%
The fast-food meal is convenient due to the hectic lifestyle.	2.1%	2.9%	30.2%	64.9%



### 5.3.5 Multiple Regression Analysis

Table 7 shows about 57.7% (R-squared = 0.577) of variation in fast consumption is explained by all independent variables and this is consistent with the F-statistic of 64.04 (sig= 0.000). Additionally, the sign of coefficient of each independent variable was positive, thus indicating a positive effect of each independent variable on dependent variable. Lastly, based on t-statistics (sig <0.05), both personal lifestyle and product attributes are significant variables while consumer behaviour is not.

Table 7. Multiple Regression Results

Independent Variables	Standardized Coefficients	t- statistic	Significant
Consumer Behavior	0.130	1.580	0.116
Personal Lifestyle	0.246	2.893	0.004
Product Attributes	0.476	6.375	0.000
R-squared	0.577		
Adjusted R-squared	0.568		
F-statistic	64.04		0.000

## 6. CONCLUSION

The prevalence of fast-food consumption undeniably involves human behaviour. Obviously UiTM students love to eat fast food. The findings show that all three determinants namely consumer behaviour, personal lifestyle and products attributes positively contributes to the prevalence of fast-food consumption among UITM students. However only personal lifestyle and product attributes are significant variables. Consumer behaviour, on the other hand, is not a significant determinant.

Based on the findings as well, majority of respondents agree that promotion influence them greatly when buying fast food. Hence doing an intensive promotion and providing more coupons are one of the effective marketing tools to persuade and encourage the consumer to purchase or consume fast food (Boylard, 2011). Major fast-food outlets have capitalised this to influence consumers to purchase their product. For example, McDonald's in Malaysia has developed McDonalds Apps where the customers can enjoy exclusive offers and promotions. Another example, Domino's Pizza and Burger King also offer e-coupon to their customers for every month.

Another aspect of fast food that influence its consumption, as has been highlighted, is whether the fast food being processed and prepared in accordance with the Islamic requirement, or in short, the halalness of fast food. This criterion is of importance as majority (91.7%) of the respondents are Muslims. It is therefore so crucial for the fast food outlets to take necessary measures to assure this halalness standard being uphold if the consumption for fast food to be sustained especially in a country such as Malaysia, where the majority of its people are Muslims.

The outcomes of a study might be different in the future. A more comprehensive study needs to incorporate all possible elements that affect fast food consumption if a more consistent and concrete evidence of fast-food consumption is required. A more accurate understanding of the

fast-food consumption prevalence would be achievable if a more diverse aspects of respondents were incorporated such as larger sample size, racial differences as well as wider geographical setting.

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