Fast-Food Consumption Patterns Among University Students: A Case Study of McDonald’s in Malaysia

Odebunmi Abayomi Tunde¹, Thiam Yong Kuek², Nitin Mohan³, Gautam Rastogi⁴, Gunjan Bhatt⁵, Hershita Singh⁶, Mar’atus Sholikhah⁷, Vaisnavee A/P Murugesan⁸, Veniysa A/P Ganeson⁹, Yoke Jing Wong¹⁰, Chiam Yeu Yap¹¹, Aisyah Wardina Binti Mohamed Hassan¹², Daisy Mui Hung Kee¹³

Universiti Tunku Abdul Rahman¹,²
IMS Engineering College National Highway 24³,⁴,⁵,⁶
Universitas Brawijaya⁷
Universiti Sains Malaysia⁸,⁹,¹⁰,¹¹,¹²,¹³

Correspondence Email: grastogi1508@gmail.com

ARTICLE INFORMATION

Publication information
Research article

HOW TO CITE

DOI: https://doi.org/10.32535/apjme.v6i2.2450

Copyright@ 2023 owned by Author(s). Published by APJME

OPEN ACCESS

This is an open-access article. License: Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Received: 9 May 2023
Accepted: 18 June 2023
Published: 20 July 2023

ABSTRACT

In contemporary times, the accelerated pace of life has brought about a noticeable alteration in the lifestyle of human beings. One of the most discernible changes is the amplified reliance on fast food among individuals, with university students being particularly susceptible to this trend. The objective of this research paper is to address the matter of McDonald’s fast-food consumption patterns among university students in Malaysia. This study aims to establish the relationship between the independent variables of taste, prices, convenience, advertisement, and eating habits and the dependent variable of McDonald’s fast-food consumption patterns among university students. A total of 150 university students in Malaysia participated in an online survey through Google Forms. The results indicate that taste, prices, convenience, advertisements, and eating habits significantly influence McDonald’s fast-food consumption patterns among university students in Malaysia. Recommendations and consequences were discussed.

Keywords: Advertisement, Consumption Patterns, Convenience, Eating Habits, Malaysia, Prices, Taste
INTRODUCTION

Fast food is known as a type of food made and served quickly, frequently in drive-thru outlets or chain restaurants. Fast food has gained immense popularity in recent years, with a wide variety of franchises and chain restaurants operating around the world. Fast food consumption has become a prominent aspect of the modern lifestyle. University students are often seen as a significant consumer group for fast food due to their packed schedules and limited time for meal preparation. This report aims to provide an in-depth understanding of fast-food consumption patterns, preferences, and related factors among university students in Malaysia.

Due to their potential impact on health and well-being, fast food consumption patterns among university students have become a matter of concern. Fast food consumption has raised serious public health concerns in Malaysia, especially among university students who are frequently involved in academic and social activities and may not have much time to prepare meals. For instance, for students who are on the go and seeking an affordable meal option, fast food outlets like McDonald's offer a quick and convenient solution. However, fast food consumption has been associated with a number of detrimental health outcomes, such as diabetes, obesity, and cardiovascular disease. The third Sustainable Development Goal (SDG 3) is mainly to promote and ensure a healthy lifestyle for individuals at every stage of life. It is crucial to examine the fast-food consumption habits among university students within the context of SDG 3 to understand the potential risks and develop strategies for promoting healthier lifestyles.

In this case study, we concentrate on McDonald's, one of Malaysia's most well-liked fast-food restaurants, and investigate the fast-food consumption patterns among university students. McDonald's is a worldwide fast-food chain that has been operating in Malaysia since 1982. It is one of the most well-known fast food brands in the entire nation, in more than 290 places spread out across the country. The renowned McChicken, Ayam Goreng McD (fried chicken), and Bubur Ayam McD (chicken porridge) are a few of the local-friendly menu items that McDonald's in Malaysia offers. In Malaysia, McDonald's also provides seasonal specials and limited-time deals that are catered to regional tastes and preferences in addition to its standard menu. It is undeniable that Malaysia is a diverse country with a significant number of university students from various cultural backgrounds, making it an interesting setting to explore the consequences of fast food on health.

SDG 3 emphasizes the importance of addressing diseases that are not communicable, such as obesity, cardiovascular diseases, and diabetes, which are closely linked to unhealthy dietary habits. Fast food consumption is often associated with high levels of calories, unhealthy fats, and added sugars, contributing to the risk of developing these diseases. University students who frequently consume fast food may be at increased risk of non-communicable diseases, which can negatively affect their health and way of life. These illnesses may result in lower productivity, higher healthcare expenses, and shorter life spans, which may impact the affected individuals and the wider community. By studying the fast-food consumption patterns among university students, we can gain insights into the potential health risks they confront and identify strategies to promote healthier eating habits.

Furthermore, this case study aims to contribute to SDG 3 by shedding light on the socio-economic elements which influence fast food consumption among university students. Factors such as affordability, convenience, taste preferences, and peer influence play significant roles in shaping dietary choices. Knowing these elements may assist with policy changes and educational initiatives that encourage university students to eat healthier. By encouraging healthier dietary habits among university students; it would be
possible to achieve SDG 3, which seeks to decrease the burden of non-communicable diseases and promote well-being for every individual. Apart from that, this strategy may also have long-term effects on subsequent generations' health and social assistance, resulting in a more equitable and sustainable future for everyone.

By examining the fast-food consumption patterns among university students in the context of SDG 3, this study aims to provide valuable insights into the potential health risks and challenges faced by this population. The findings can inform the development of targeted interventions and strategies to promote healthier dietary habits and contribute to the overall well-being of university students in Malaysia. Ultimately, this research aligns with the goal of SDG 3 to promote well-being and maintain healthy lives for everyone.

**LITERATURE REVIEW**

**Consumption Patterns**

Consumption patterns have constantly been a key predictor of a generation's identity. However, in a world where globalization tends to assimilate everything and technological advancement tends to speed up the process of globalization, certain might anticipate that identities are vanishing more quickly than ever (Chkoniya, Madsen, & Bukhrashvili, 2020). Food consumption patterns refer to the types and quantities of food eaten by people with certain intentions within a specific time (Timisela, Girsang, & Tupamahu, 2021). Nowadays, the consumption of various fast food has grown across the globe in both developed and developing nations (Mahajan & Gothankar, 2020). In regard to food consumption patterns, SDG 3's foundational goals of ensuring a healthy life and promoting well-being are closely related to nutritional behaviors, which are a facet of sustainable food consumption. Thus, the development and promotion of effective education programs, raising global awareness, and recognizing actions that will lead to behavioral change in people will be necessary to enable the components of sustainable food consumption, such as a balanced diet, mindful consumption, and preservation of the environment (Haas, 2021). In order to achieve the goals of SDG 3, McDonald’s should comprehend the consumption patterns of university students in Malaysia.

**Price**

Price is the total of all the values that customers are willing to pay in return for a good's or service's benefits. It also indicates the total of the money needed to charge for a good or service (The-Definition.com, n.d.). Pricing will affect consumer consumption patterns as the higher price of a product cause the demand to decrease, resulting in a decline in sales. In contrast, products supplied for less than the going rate are assumed to sell in more numbers (Zhao, Yao, Liu, & Yang, 2021). Offering a quality meal at a reasonable price is crucial for a food and beverage business not only provides opportunities for all income levels of society to have their first try at McDonald's. At the same time, reputation can be retained and improved, which can greatly impact the expansion of customers' sources. Hence, price plays a significant role among consumers in our daily life. Pricing has a significant impact on consumers' daily lives, especially low-income consumers. Lower-income consumers were significantly more aware of the changes in value and price than those with higher incomes (Steenhuis, Waterlander, & De Mul, 2011). In this instance, McDonald's Malaysia has given all Malaysians of all ages the opportunity to take part in McDonald's meals for a reasonable price of just RM5 by offering the Menu Rahmah which has been launched today (Baysir, 2023). Thus, we hypothesize that:

H1: Price is positively related to consumption patterns

**Taste**

Taste is the main factor influencing food choice. It is a crucial factor in determining how tasty and appealing food is, which influences food consumed. Ervina, Berget, and Almli's
A survey of the International Food Information Council Foundation has been undertaken so far. It has been proven that in 2020, 88% of respondents said that flavor was their main deciding factor when making a purchase. In general, taste perception can be influenced by a few causes: age, culture, lifestyle, and current health status. Due to the abundance of restaurants, fast food options are readily accessible in a variety of food styles for every meal of the day. Fast food could taste better than other dishes due to their smell, the ‘mouthfeel’, the ingredients added to the fast food, memories, and the appearance of the fast food (Marcelino, 2022). After making minor adjustments that make a significant difference in every bite, Malaysians are invited to try the newest addition to McDonald's menu of traditional beef burgers! Beyond just the meal, McDonald's strived to offer customers the best-tasting beef burger possible (Hong, 2022). Thus, from the explanation above, we hypothesize that:

H2: Taste is positively related to consumption patterns.

Convenience

Convenience food is the type of food that saves time in acquisition, preparation, and cleanup (Wakelet, n.d.). Fast food is convenient as it is always ready to be served, and if it feels necessary, just reheat it in several minutes, and it can be consumed. Convenience has become the priority of a consumer whether to choose fast food as an option. This is in line with Kee et al. (2022) statement that the greater the level of convenience consumers feel, the higher the level of customer happiness in retailers. McDonald’s Malaysia's Vice President and Chief Marketing Officer, Melati Abdul Hai, claims that McDonald’s has put effort into making it simpler for consumers to enjoy their preferred McDonald’s meal by removing the inconvenience of waiting in a queue to place their order results from the order & collect features introduced typically takeaway, dine-in, drive-thru, and drive-in (Hong, 2022). McDonald’s Drive-Thru meets the expectation of the customers during mealtimes as this service is hassle-free and efficient (McDonald's Malaysia, 2019). Besides, the implementation of touch-screen kiosks also brings convenience for consumers in ordering food. This can be seen in the perspective of eliminating queuing up in line for a long time as payment can be made after ordering through the options of debit card, credit card or QR payment. At the same time, it is effective in the improvements of the displaying the food offers.

H3: Convenience is positively related to consumption patterns.

Advertisement

Advertising can be displayed in various ways, and it is crucial to display at the right place and right time. Smart and proper advertising is effective in building your good reputation and connecting with consumers who might never hear of or know about you. Additionally, it also assists with restaurant promotions, including introducing new items, discounts, and special events (CHRON, 2017). Food products can simultaneously satisfy consumers’ physiological, utilitarian, and mental requirements, and the four senses of taste, smell, sight, and texture may be used more effectively in food advertising than in other categories of goods (CHRON, 2020). With the combination of digital, print, and television advertisements, McDonald’s communicates with their target audience. It is obvious that more people recognize the iconic Yellow ‘M’ results from the effective marketing strategies adopted by McDonald’s in line with staying competitive in the food and beverage industry. Hence, the effectiveness in advertising or promoting products is dependent upon its brand name and how far it reaches customers.

H4: Advertisement is positively related to consumption patterns.

Eating Habits

Eating habits indicate how and why people eat, follow their preferences, or prioritize their health. Eating habits are the methods humans get, store, utilize, and discard food (Encyclopedia.com, n.d.). Besides, cultural, religious, economic, and environment have become important reasons for why consumers remain or change their eating habits. As
time passed, more and more people cared about the sufficient nutrition obtained from food and the emphasis on healthy eating habits. Fast food is always deemed to be unhealthy, and this concept has been implemented among citizens since they were young. The increase in fast food consumption will lead to an increase in various diseases, for instance, obesity, diabetes, cardiovascular disease as well as high blood pressure. However, McDonald’s has promoted a series of choices that are below 500 calories, for instance, chicken porridge (297 kcal), grilled chicken burger (409 kcal), chicken McNuggets (274 kcal), Filet-O-Fish Burger (325 kcal), and McChicken Burger (393 kcal) (Simel, 2019). The introduction of these kinds of choices is friendly for those who are on a diet and hesitate to take fast food as a choice of meal. Besides the introduction of vegetarian-based food, McVeggie is an option considered for vegetarians, and at the same time distributes more target audiences.

H5: Eating habits are positively related to consumption patterns.

The research model is shown in Figure 1, and five distinct hypotheses were developed.

**Figure 1. Research Model**

![Research Model Diagram]

**RESEARCH METHOD**

There are two forms of research approaches, which are quantitative and qualitative approaches. In this study, we used a quantitative approach because it can measure the reactions of several people with a limited number of questions, making it easier to compare and shortening the time for data collection.

The quantitative approach allows researchers to conduct simple statistical analyses of statistics that require combining data, showing relationships between data, or comparing all aggregate data (Coghlan & Brydon-Miller, 2014). In this study, we need to prove what is the impact of the variables that are independent of the dependent variable. Therefore, we have chosen taste, price, convenience, advertisement, and eating habits as the independent variables, while McDonald’s fast food consumption patterns among university students as the dependent variable.

The population in this study involves several university students in Malaysia. The population is a generalization made up of things or individuals with certain quantities and qualities that researchers have chosen to study and make conclusions from (Sugiyono, 2019). We used a probability sampling method with a simple random sampling technique, and 150 university student respondents in Malaysia were selected. By randomly selecting direct samples from the population, simple random sampling makes sure that every population item has an equal likelihood of getting selected in the sample and of being chosen (Kothari, 2004).

About 150 university students from Malaysia were asked to complete a Google form questionnaire in order to gather data for this study. A questionnaire is a method of gathering data in which a number of questions or written statements are presented to
There are two types of questions in the questionnaire, open and closed. Open-ended questions require the respondent to provide a written description of the topic as their response. At the same time, short answers or only one possible response are required for closed questions (Sugiyono, 2017). It is possible to explore primary data using both types of questionnaires. Primary data is information gathered directly from research participants (Azwar, 2009). As there are only a few possible answers to each question, this study uses a closed questionnaire format, requiring the respondent to select the one he feels is most appropriate for him. Closed questionnaires were chosen to assist respondents in responding quickly and facilitate data analysis for researchers and tabulate the results of all questionnaires that have been collected. Questions or statements in the questionnaire will later relate to habits, reasons, and the impact of fast-food consumption. Besides, the significance and dependencies of each variable have been assessed for all the data collected through the utilization of IBM SPSS Statistics software, the digital survey.

### RESULTS

#### Table 1. Summary of Respondents’ Profile (N=150)

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>89</td>
<td>59.3</td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>40.7</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>134</td>
<td>89.3</td>
</tr>
<tr>
<td>25-34</td>
<td>14</td>
<td>9.3</td>
</tr>
<tr>
<td>45-54</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>117</td>
<td>78.0</td>
</tr>
<tr>
<td>High school diploma or equivalent</td>
<td>26</td>
<td>17.3</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>7</td>
<td>4.7</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>24</td>
<td>16.0</td>
</tr>
<tr>
<td>Internship</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Part-time</td>
<td>25</td>
<td>16.7</td>
</tr>
<tr>
<td>Self-employed</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Student</td>
<td>97</td>
<td>64.7</td>
</tr>
<tr>
<td>Annual Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than RM 25,000</td>
<td>140</td>
<td>93.3</td>
</tr>
<tr>
<td>RM 25,000 – RM 50,000</td>
<td>6</td>
<td>4.0</td>
</tr>
<tr>
<td>RM 50,001 – RM 100,000</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>RM 100,001– RM 200,000</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>RM 200,001 or more</td>
<td>1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

The profiles of the respondents are summarized in Table 1. Males comprised more than half of the respondents, which comprised 89 respondents (59.3%), while females comprised 61 respondents (40.7%). It can be concluded most of the respondents are between the age category of 18-24 years old (89.3%) as well as the least were under the age category of 45-54 years old (1.3%), while for ages between 25 to 34, it made up of 14 respondents (9.3%). From the perspective of education level, 117 respondents are from bachelor’s degree (78.0%), 26 respondents from high school diploma or equivalent (17.3%), and only 7 respondents from master’s degree (4.7%). Additionally, the survey includes 97 respondents who are students, 25 who work part-time, 24 who work full-time, 3 who are self-employed, and 1 who is in an internship.
93.3% of the respondents have an annual income that is less than RM25,000, as most of our respondents are students. About 4.0% and 2.0% of respondents have an annual income between RM25,000 to RM50,000 and RM50,001 to RM100,000 respectively. There was just one respondent whose yearly income was RM200,001 or more. Table 2 below shows zero-order correlations between variables, descriptive statistics, and reliability data. All tested variables have high-reliability values between 0.81 and 0.90.

### Table 2. Descriptive Statistics, Cronbach’s Coefficients Alpha, and Zero-order Correlations for All Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>0.897</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td>0.741**</td>
<td>0.840</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience</td>
<td>0.675**</td>
<td>0.750**</td>
<td>0.829</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertisements</td>
<td>0.579**</td>
<td>0.678**</td>
<td>0.613**</td>
<td>0.827</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eating Habits</td>
<td>0.645**</td>
<td>0.701**</td>
<td>0.550**</td>
<td>0.618**</td>
<td>0.816</td>
<td></td>
</tr>
<tr>
<td>Consumption Patterns</td>
<td>0.912**</td>
<td>0.871**</td>
<td>0.745**</td>
<td>0.611**</td>
<td>0.688**</td>
<td>0.858</td>
</tr>
<tr>
<td>Number of Items</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Mean</td>
<td>3.63</td>
<td>3.89</td>
<td>3.99</td>
<td>3.80</td>
<td>3.57</td>
<td>3.86</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.86</td>
<td>0.73</td>
<td>0.73</td>
<td>0.80</td>
<td>0.90</td>
<td>0.74</td>
</tr>
</tbody>
</table>

Note: \(N = 150; \ *p < .05, \ **p < .01, \ ***p < .001.\) The diagonal entries represent Cronbach’s coefficients alpha.

### Table 3. Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Consumption Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>0.577***</td>
</tr>
<tr>
<td>Taste</td>
<td>0.420***</td>
</tr>
<tr>
<td>Convenience</td>
<td>0.066</td>
</tr>
<tr>
<td>Advertisements</td>
<td>-0.063</td>
</tr>
<tr>
<td>Eating Habits</td>
<td>0.024</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.917</td>
</tr>
<tr>
<td>F Value</td>
<td>329.833</td>
</tr>
<tr>
<td>Durbin-Watson Statistic</td>
<td>1.852</td>
</tr>
</tbody>
</table>

Note: \(N = 150; \ *p < .05, \ **p < .01, \ ***p < .001\)

As shown in Table 3, consumption patterns are the dependent variable, while price, taste, convenience, advertisements, and eating habits are the independent variables. The hypothesis developed was evaluated using regression analysis. The output indicated that price and taste were significantly and positively related to consumption patterns. Hence, H1 and H2 are proven. The output’s \(R^2\) value is 0.917, indicating that price and taste are responsible for 91.7% of changes in consumption patterns. Price shows a beta value of 0.577, the most influencing factor impacting the dependent variable. Besides, taste showed a beta value of 0.420. Conversely, convenience, advertisements, and eating habits show an insignificant effect on consumption patterns. As a result, H3, H4, and H5 are not supported.
**DISCUSSION**

The independent variables impacting the consumption behavior of McDonald’s fast food among university students were studied in this research. This study’s results have proved that price and taste significantly impact the consumption behavior of McDonald’s among university students who regularly visit and select this fast-food restaurant. Both price and taste are independent variables that directly affect consumption behavior among university students. The results of this study show that fast food’s price and taste are significant factors as well as independent variables, along with the fact that 91.7% of variations in consumption patterns are influenced by these two independent variables. It demonstrates that these two variables are the most important ones that have an impact on the dependent variable.

After comparing the consumption patterns among university students, the price was the most significant factor influencing students to choose McDonald’s. The significant influence of price on students’ consumption behavior indicates that the student’s income would influence whether they will continue to purchase at the restaurant. One strategy of McDonald’s would be to offer special discounts or promotions to university students only. For instance, they might provide a meal discount for students or a unique meal deal exclusively for college students. This approach might draw in budget-conscious students who are on the hunt for a good deal. Furthermore, to make their products more accessible to university students, they might modify their pricing strategy. This might include introducing a value menu that is especially geared toward students or lowering the prices of some menu items. As an alternative, they might provide smaller portions at a lower cost, which could be attractive to students seeking a quick and reasonably priced snack or meal. Generally, McDonald’s has been a success since its inception by reason of its customer service and everyday low prices (EDLP). Besides, in the effort to offer an affordable price, McDonald’s aligned with the government’s menu Ramah campaign, has promoted meals for RM5 (Business Today, 2023). Every dining establishment works hard to develop a positive brand image by consistently providing outstanding food, friendly service, and affordable prices so that everyone, especially university students, can afford them. In the majority of these fields, McDonald’s has prospered and established itself, winning praise from all over the world for its delectable Big Mac and fries, friendly, fresh staff, and affordable prices.

However, employing this concept comes with risks as well. A potential risk is that there might be worries about the effects of encouraging fast food consumption among university students, who might currently be at greater risk for obesity and unhealthy eating patterns. This could have a negative impact on the university student’s health and strain on healthcare systems, which could hinder efforts to achieve SDG 3. McDonald’s would have to carefully weigh the advantages and disadvantages of any pricing strategy.
aimed at university students. To alleviate any worries about the potential health effects of their products, they might need to think about introducing healthier menu options.

The second most crucial factor affecting the consumption behavior of McDonald's among university students is the taste of the food provided in the restaurant. The industry is heavily reflecting the changes in consumer tastes and preferences. They can be seen in the layout of restaurants as well as in the menus, prices, and marketing techniques employed by these industries. McDonald's is well known for its unique flavor, which has significantly increased its popularity among university students. One strategy to discover more about university student taste preferences is to conduct market research. They could modify their menu to include more items that are popular among university students in accordance with research. However, this idea carries risks as well. A potential risk is that a preoccupation with taste may cause one to neglect the negative health effects of consuming fast food. This might lead to unhealthy eating patterns and poor health outcomes, which might hamper SDG 3 implementation efforts. Hence, to align with the goals of SDG 3, McDonald's could create a tasty and healthier menu based on research with not only have classic burgers and fried fast food. However, it could also create healthier food like Wend's salads and grilled chicken sandwiches or healthier muesli or fruit cups for the morning breakfast at McDonald's. Nowadays, to compete with the allegedly unhealthy McDonald's breakfast selections (e.g., Subway), have begun to offer breakfast options. Moreover, another potential risk is that individual preferences can differ greatly, so what some students find appealing may not necessarily appeal to others. McDonald's should therefore think about providing a variety of tastes and flavors to satisfy a wider range of preferences among university students.

Fast food such as McDonald's is an all-time favorite among all age groups, especially children and teenagers. Consumers will still prefer to eat fast food whenever they are in a hurry situation or want to be quick as it is easy to get. Also, due to their affordable and sensible prices for their food and services, consumers (e.g., students) prefer to eat at McDonald's fast-food restaurants. The study also reveals that 84% of students in Malaysia consumed fast food due to their frequent snacking and meal-skipping habits. They frequently fail to consume or reach the required amounts of nutrients (Isa, Adam, Subari, Nordin, & Fauzi, 2022). This aligns with our research where price, taste, convenience, advertisements, and eating habits are the primary and main causes that affected McDonald’s fast-food consumption patterns among university students in Malaysia.

From the discussion and results above, hypothesis H1 and H2 have been accepted, and hypotheses H3, H4, and H5 have been rejected and not accepted. This result has proven and given us a better understanding of the strong factors that influenced students’ consumption patterns towards McDonald’s fast food. We learned about eating habits and the potential health effects of university students by analyzing their fast-food consumption patterns throughout the study. Thus, the price and taste of McDonald’s fast food surely impacted the students’ consumption patterns as they will consider and weigh those factors against their ability to pay and whether the price is worth the taste of the fast food. This could assist in identifying areas that require improvement and the necessity for interventions and education aimed at promoting healthier eating habits among university students that align with one of the Sustainable Development Goals (SDG), which is good health and well-being.

CONCLUSION

From the study of university students, we can conclude that the independent variables of price and taste play important roles and directly influence the consumption patterns of consumers while independent variables of convenience, advertisements, and eating
habits are not significantly influential towards the consumption pattern of university students. As our results indicated that the independent variables of price and taste significantly influence the dependent variable of consumption pattern.

There are some recommendations provided in our later discussion, which can be viewed as a reference for McDonald’s to make further improvements to expand their business. First, McDonald’s can hold on to further marketing research by distributing a survey through various channels to reach target consumers. For instance, younger generations, like university students, mainly focus on suggesting ideas for improvements or modifications on the products from the aspects of price and taste. It is important to have an affordable price of food with high quality to attain consumer satisfaction and a good brand name. Apart from this, McDonald’s is encouraged to promote a special seasonal meal with special price discounts for university students. For instance, by showing a student card, the particular student can get a special discount on the meal ordered, which is the same as a normal customer. In other words, the student can get a lower price than a non-student customer. Furthermore, with the introduction of the McDonald’s app, a way to maintain current customers and attract new customers, McDonald’s can introduce an effective method of claiming a free side meal like French fries, sundae, or apple pie with an order of meals by sharing a particular promotion post on social media and bringing two or three new users of the app to make expenses at a nearby branch or use the delivery services. To ensure a healthy meal, which is currently emphasized by the majority of people, it is encouraged to introduce a variety of choices that can be categorized under a less sugar and less salt option. Eventually, in alignment with SDG 3, Good Health, and Well-Being, McDonald’s must always retain its quality and ensure people’s safety in meal consumption.

LIMITATION
Nonetheless, there are some limitations that can be discovered in our study. Firstly, the survey questionnaire was not extensively distributed across Malaysia. Thus, not all university students in Malaysia participated in this survey. Secondly, the study exclusively targeted and focused only on university students, most of whom were Generation Z. Henceforth, the results and analysis of the present study cannot be generalized. Thus, future researcher(s) is recommended to increase the sample size and target the whole population so that the results will be more accurate and meaningful.

ACKNOWLEDGMENT
The authors are highly grateful and thankful to all university students in this study who participated and showed their utmost support during the queries of the questionnaire.

DECLARATION OF CONFLICTING INTERESTS
The authors declare that there is no conflict of interest.

REFERENCES


