Research Article

Factors That Influence University Students' Attitudes Towards Fast-Food Consumption in Malaysia During the Recovery Period of COVID-19

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ABSTRACT

Fast food is a form of cuisine that can be prepared quickly and sold to customers at an affordable price. During the recovery period of Covid-19, the need for fast food may also be observed through changes in customer demand, such as taste and lifestyle, which leads to the introduction of various new menus by fast food firms to suit customer demand. This also influences university students' attitudes regarding fast food consumption during the period. The research objective of this study is to examine the relationship between independent variables such as taste, time-saving as well as promotion attractiveness and the dependent variable on university students' attitudes towards fast food consumption during the recovery period of Covid-19. A survey was conducted by using online questionnaires via Google Form, involving 400 respondents from universities in Malaysia. The methodology used to analyse data obtained in this study included descriptive analysis, reliability analysis, and Pearson correlation analysis. The findings revealed that the three independent variables are significantly related to the dependent variable. This study can help researchers discover more about fast food, and the information provided can be used as reference material in the future.

Keywords: Attitudes, Covid-19, Fast Food, University Students.

INTRODUCTION

Fast-food consumption in Malaysia is on the rise among all demographic groups, but particularly among young university students (Blešić et al., 2018), and the influence of western culture eating such as burgers, French fries, pizza, and fried chicken has become a trend among Malaysians (Man et al., 2021). Life as a student is difficult because they have a tight schedule of classes and must catch up by the assignments' due date. Adding to the difficulty, the students

must now face fully online classes, and this will cause influence university students' attitudes toward choosing fast-food meals.

University students' fast food intake is high (Mokhtar et al., 2020). The influence of fast-food corporations' creative marketing strategies is a major attraction. Recent marketing strategy during the Covid-19 period relies primarily on applying technology to satisfy customer demand. As the Internet grows and becomes a trend, shopping applications such as online delivery for ordering fast food meals enable users to explore menus and receive a discount before selecting. Furthermore, fast-food restaurant advertisements usually make fast food look healthy, making the consumers readily persuaded (Gerritsen et al., 2021). Fast food is characterised as being readily available, most option, tasty and reasonably priced (Xiao et al., 2018).

The study aims to investigate the elements that positively affect university students' attitudes about fast food consumption in Malaysia during the recovery period from Covid-19. In this study, the researchers will focus on university students' views about fast food intake during the Covid-19 recovery phase.

This study consists of three objectives:

1. To identify the relationship between taste and university students' attitudes toward fast food consumption during the recovery period of Covid-19.
2. To examine the relationship between time-saving and university students' attitudes toward fast food consumption during the recovery period of Covid-19.
3. To illustrate the relationship between promotion attractiveness and university students' attitudes toward fast food consumption during the recovery period of Covid-19.

Significance of Study

This study allows researchers to have a deeper understanding of which elements impact university students' fast food consumption during the recovery period of Covid-19. It may be claimed that fast food has become the preferred diet of university students due to its convenience and speed of preparation. This study also examines the factors of students' attitudes about fast food consumption. This is because the study's objective guides IV the study's title is the factor of fast-food intake among especially in post Covid-19. This study will also provide new information, knowledge and the latest resources on students' opinions about fast food consumption. This research may be valuable for further investigation into this topic. Future researchers will be able to determine what factors impact students' perceptions about the fast-food sector due to this study. It can assist researchers in collaborating with the fast-food business to address the demand for fast-food items among students and generate new fast-food goods that can help the fast-food sector retain its profitability. Based on the findings, researchers can study the consumers' expectations regarding fast food consumption and students' attitudes towards fast food intake, particularly among students at the university in Malaysia. Researchers may also observe the prevalence of fast-food consumption,

LITERATURE REVIEW

Taste

It is a well-known fact that the younger generation, such as university students, like trying new foods and will choose fast food based only on flavour. According to Alom et al. (2019) and Ebadi et al. (2018), the dish's flavour is a significant determinant in young people's choice of fast food. In addition to its excellent flavour, it is also connected to the fact that fast food is readily made in a short amount of time. This also occurs as a result of age-related changes that are considerable. From infancy to maturity, a person's eating preferences will alter according to their evolving tastes.

In addition to taste preferences, food selection is also influenced by the menus given by food-producing corporations. Some reasonably nutritious foods, such as fruits, can assist this group in consuming less high-calorie fast food. However, their need for fast food is mainly driven by their desire for high-calorie items, as the majority of these fast foods are tasty and should appeal to university students (Lemia, Shaban, 2019). According to Khongrangjem et al. (2018), the degree of the flavour of fast-food products has the most significant impact on student's attitudes and is the primary factor in boosting fast-food consumption. They desire to taste and appreciate the flavour of the dish itself. When they are anxious, they eat something nice, which might help them relax.

Time Saving

Due to the Covid-19 epidemic, individuals were required to work or study online and were only authorised to leave their homes for medical reasons, critical employment, food purchases, or emergencies (Koh, 2020; Patwary, 2022). As a result of such dramatic life changes, people's lifestyle behaviours, such as their eating habits, might be negatively affected. During the Covid-19 epidemic, university students experienced significant and usually unfavourable changes in their eating choices, according to research by Powell et al. (2021). Differences in the availability of food caused these alterations.

Consumption of fast food has become a global habit. Individuals spend more effort and considerably less time preparing meals at home. Thus, the rapid growth of the fast-food industry has spawned a surprising trend, especially among young adults and university students, due to its fast service, convenience, and low cost (Mokhtar et al., 2020; Patwary & Rashid, 2016). Therefore, saving time is one reason why most students favour fast food, as they perceive it to be more convenient and time-efficient.

In addition to their economic preferences, students choose fast food since their hectic schedules and time limits make cooking impossible, even though they reside outside of a dormitory. In contrast to a traditional restaurant, where guests must wait in line for a server to serve and take their orders, diners at this restaurant do not have to wait. While rapid meal preparation takes only a few minutes, students may enjoy their lunch or supper without wasting time.

Promotion Attractiveness

According to Shamsi and Khan (2017), promotion attractiveness is a technique marketers use to acquire new and prospective customers and retain existing ones. Advertising is the most prevalent kind of marketing in the fast-food sector. It involves attempting to persuade people to purchase products or services via the use of a persuasive marketing message. Fast-food

businesses frequently employ strategies to market their products and attract more customers. Moreover, price promotion has evolved into a crucial marketing concept with the capacity to influence customer behaviour. It has received the most budget relative to other branding techniques in the fastest-growing areas because it can increase sales rapidly and enable customers to build brand awareness across different media channels. The most popular things are maintained at affordable prices, while new or less popular items are discounted. The product offering developed over time to accommodate client expectations.

Typically, in order to increase sales volume, the fast-food sector employs promotional techniques to entice consumer buy intent. The significance of the launch of a new product or service is conveyed by the attractiveness of the promotion attractiveness of the promotion conveys the significance of the launch of a new product or service, and the firm has deployed a variety of marketing strategies to stimulate customer demand. Students are considered to be attracted to and influenced by advertising due to their frequent and extensive exposure to it.

University Students' Attitudes Towards Fast Food Consumption in Malaysia During Post Covid-19

Based on a study by Ben Hassen et al. (2021), the Covid-19 have effects on fast-food consumption and purchasing attitude. Fast food can be defined as simple meals that come from American meals, have a reasonable price, quick service and use media social to advertise their services, such as hamburgers, pizza, sandwiches and French chips (Ghoochani et al., 2018; Patwary et al., 2020).

Day by day, the need for fast food among young people is growing every day because of a few factors that influence the university students' attitude toward purchasing fast food products, such as good taste, affordable price, offer fast service, and convenience (Jashari & Kotsios, 2019). Due to a lack of time, they will choose less expensive and simple food to consume. According to Mokhtar et al. (2020), there are 84.5% of university students in Malaysia choose to buy and consume fast food; meanwhile, there 15.5% of university students in Malaysia do not take fast food. They choose home-cooked food because they are more concerned with health and finances. In the study conducted by (Patwary et al., 2022; Syafiqah et al., 2018) students, fast food is the main source because they live far from their families.

Referring to Akhter (2019), during Covid-19 Malaysian fast-food consumers are more focused on the cleanliness of product, taste, place and freshness before making a decision, which influences their attitudes as a fast-food consumer. This is because they want to ensure the product, they ate is safe and free from Covid-19 virus infection.

Research Hypotheses

The research hypothesis is to identify students' intake of fast food, especially during the recovery period from Covid 19.

H₁   There is a relationship between taste and university students' attitudes toward fast-food consumption in Malaysia during the recovery period from Covid-19.

H₂   There is a relationship between time and university students' attitudes toward fast-food consumption in Malaysia during the recovery period from Covid-19.

H₃   There is a relationship between promotion attractiveness and university students' attitude toward fast-food consumption in Malaysia during the recovery period from Covid-19.

Research Framework

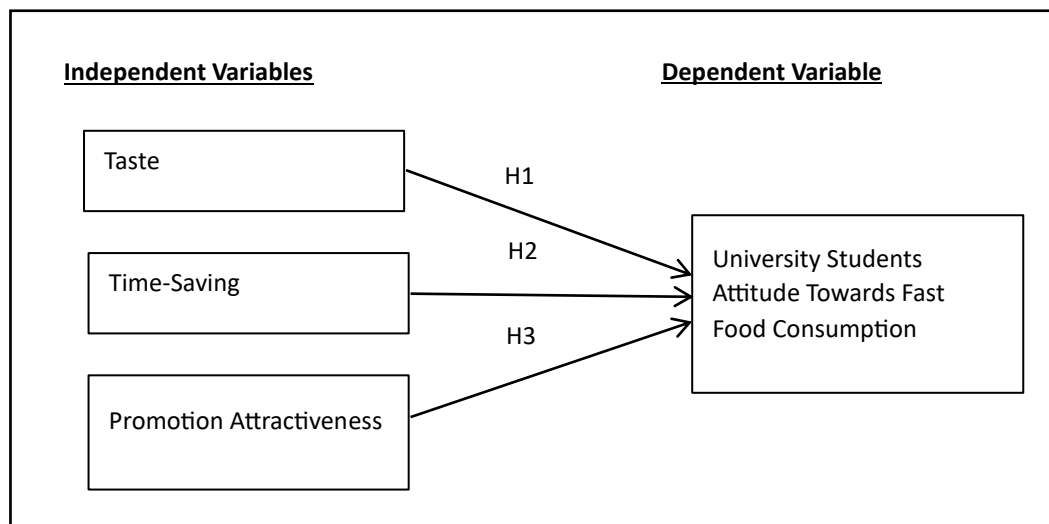Figure 1 below shows the research framework for this study.

Figure 4: Research Framework

METHODOLOGY

Research Design

The fundamental purpose of this study is to evaluate the factors that impact university students' views about fast food consumption in Malaysia during the Covid-19 recovery phase. Therefore, the researchers will collect primary data quantitatively. Using this methodology, the researchers may investigate further and determine how variables impact university students' views about fast food intake during the Covid-19 recovery period. In addition, this methodology will describe the phenomenon of food intake among Malaysian university students during the Covid-19 recovery phase.

Data Collection

Data collection is acquiring, measuring, and assessing relevant facts for research using established accepted methodologies. Based on the acquired data, a researcher may evaluate their hypothesis. For various study areas, the technique for data collection varies based on the information required. In the majority of instances, regardless of the subject of study, data collection is the first and most important step. This study's data will be collected using online

questionnaires. Malaysian university students will be randomly assigned an online quiz. Google Forms will be distributed over social media sites, including WhatsApp, Facebook, and Telegram. It is vastly superior for data collecting, as researchers can rapidly distribute and collect questionnaire replies. The questionnaire emphasises the purpose of the study, the objectives of the inquiry, and the respondent's consent to the confidentiality of the information supplied. All respondents may respond to this question using their smartphones or computers, making it much simpler for them to react from anywhere and at any time.

Sampling

The sampling method is a technique for selecting a sufficient number of policy examples from the population. In this approach, the researcher will pick many demographic bases as subjects. Probability sampling and non-probability sampling are the two sorts of sample methods that the researcher will employ to determine the population size that will be examined. Probability sampling is a type of sampling that employs a random selection. Non-probability sampling approaches include collecting samples so that no element of the population has a known probability of being picked. To create a random selection system, methods or protocols must be followed to ensure that all population units have equal chances of being selected. To learn more about the issue, researchers will select a probability sampling approach for this study. Based on this study, a sample will be drawn from the target demographic of university students who purchased fast food during the Covid-19 recovery period.

Data Analysis

Data analysis is the process through which a business gathers data on purpose, analyses it, and converts it into information. This is a method that aids in the implementation of the quality management system. The methodology used to analyse data obtained in this study included descriptive analysis, reliability analysis, and Pearson correlation analysis.

FINDINGS

Result of Frequency Analysis

Table 2: Frequency Analysis

Characteristics	Frequency (N)	Percentage (%)
Gender		
Male	189	47.3
Female	211	52.8
Age		
18 – 21 years old	80	20.0

22 – 25 years old	306	76.5
26 years old and above	14	3.5
Year		
Year 1	**51**	**12.8**
Year 2	**54**	**13.5**
Year 3	**188**	**47.0**
Year 4	**107**	**26.8**
CGPA		
2.50 and below	**16**	**4.0**
2.50 and above	**39**	**9.8**
3.00 – 3.50	**177**	**44.3**
3.50 – 4.00	**168**	**42.0**
Race		
Malays	**127**	**31.8**
Chinese	**64**	**16.0**
Indian	**31**	**7.8**
Others	**178**	**44.5**
Education Level		
Bachelor	**378**	**94.5**
Master	**15**	**3.8**
PHD	**7**	**1.8**
Marital Status		
Single	**384**	**96.0**
Married	**16**	**4.0**

There are 400 university students in Malaysia has been participated in this study. The male respondents were 47.3% (n=189) and female were 52.8% (n=211). It indicates that the

percentage is highest for male students than for female students. In terms of age, the highest percentage for 22 – 25 years old had stated 76.5% (n=306), followed by the age group 18 – 21 years old, which was 20.0% (n=80) and the lowest percentage for 26 years old and above had stated.5% (n=14). Next, for year, the highest percentage is Year 3, with 47.0% (n=188), followed by Year 4 with 26.8% (n=107), Year 2 with 13.5% (n=54) and the lowest percentage is Year 1 with 12.8% (n-51). In terms of CGPA result, most of respondents got 3.00 – 3.50, with 44.3% (n= 177), followed by 3.50 – 4.00, with 42.0% (n=168), 2.50 and above, with 9.8% (n= 39) and the rest is 2.50 and below, with 4.0% (n=16). In terms of race, the table shows that others races represent the highest percentage with 44.5% (n=178), followed by Malays, with 31.8% (n= 127), Chinese, with 16.0% (n= 64) and Indian, with 7.8 (n=31). Besides that, for the education level, the bachelor is the highest percentage with 94.5% (n=378) and PHD is the lowest percentage with 1.8% (n= 7). Lastly, for marital status, most of the respondents single with 96.0% (n=384) and for married is 4.0% (n= 16).

Descriptive Analysis

Table 3: Descriptive Analysis

Variable	Items	Mean Score	Standard Deviation
Taste	I love to eat fast food because of its taste.	4.18	0.799
	The taste of fast food is really mouth-watering.	4.12	0.758
	The taste of fast food added to my palate and make my meal more enjoyable.	4.05	0.793
	The color and flavor of fast food stimulate the appetite.	4.11	0.772
	For me fast food is tastier than other food tastes better and satisfies my need for food.	3.76	1.048
	Fast food contains sugar, calories and saturated fats that release the neurotransmitters dopamine and oxytocin, which cause relaxation	4.06	0.765
Time Saving	Fast food consumption saves a lot of my time	4.25	0.850
	I really like to enjoy fast food because it helps me save energy to prepare food	4.10	0.896
	I find it easy to finish my work by not wasting my time cooking for myself.	4.18	0.870
	I did not have to wait a long time to buy fast food.	4.10	0.876
	It is easy to find a fast-food restaurant just by using a smartphone.	4.34	0.769

	The small designed fast-food packing makes it easy for me while travelling.	4.25	0.724
Promotion Attractiveness	I prefer visit fast food outlets when there is a promotion.	4.19	0.810
	In my opinion, promotion has an impact on the demand of fast food.	4.28	0.720
	I think fast food promotion attractiveness makes me feel excited.	4.16	0.824
	I think promotion helps to build a good relationship between customers and fast-food outlets.	4.24	0.716
	I think promotion can help to increase my confidence level to buy fast food.	4.14	0.837
	I think discounted and special offers can help to increase my satisfaction level to buy fast food	4.21	0.820
University Students' Attitude Towards Fast Food Consumption	Eating fast food can help increase my mood for study.	3.91	1.103
	I know how far the benefits and effects of fast food to me	4.14	0.832
	I believe that I can control myself to consume fast food.	4.16	0.877
	I feel enjoy while eating fast food.	4.13	0.794
	Eating fast food can help to reduce my stress.	4.12	0.916
	The brand of fast food affects me to consume fast food.	3.92	0.965

The highest mean score for the factor of taste was "I love to eat fast food because of its taste" with 4.18, followed by the item "The taste of fast food is mouth-watering" (4.12), "The colour and flavour of fast food stimulate the appetite (4.11), " Fast food contains sugar, calories and saturated fats that release the neurotransmitters dopamine and oxytocin, which cause relaxation, pleasure and enjoyment" (4.06), "The taste of fast food added to my palate and make my meal more enjoyable" (4.05) and "For me, fast food is tastier than other food tastes better and satisfies my need for food" (3.76).

Next, the highest mean score for the factor of time-saving is "It is easy to find a fast food restaurant just by using a smartphone" with 4.34, followed by both items which are "Fast food consumption saves a lot of my time" (4.25) and "The small designed fast food packaging makes it easy for me while travelling" (4.25), "I find it easy to finish my work by not wasting my time cooking for myself" (4.18). The lowest item is "I really like to enjoy fast food because it helps me save energy to prepare food" and "I did not have to wait a long time to buy fast food" with the same value of mean of 4.10.

For the factor of promotion attractiveness, the item " In my opinion, the promotion has an impact on the demand of fast food" is the highest mean score with 4.28, followed by "I think promotion helps to build a good relationship between customers and fast food outlets" (4.24), "I think discounted, and special offers can help to increase my satisfaction level to buy fast food" (4.21), "I prefer to visit fast food outlets when there is a promotion" (4.19), " I think fast food promotion attractiveness makes me feel excited" (4.16) and " I think promotion can help confidence level to buy fast food" (4.14).

The highest mean score for university students' attitude toward fast food consumption were 4.16 for the item "I believe that I can control myself to consume fast food", followed by "I know how far the benefits and effects of fast food to me" (4.14,), "I feel enjoy while eating fast food" (4.13), "Eating fast food can help to reduce my stress" (4.12), "The brand of fast food affects me to consume fast food" (3.92) and "Eating fast food can help increase my mood for study" (3.19)

Result of Reliability Analysis

Table 4: Reliability Analysis

Variables	Number of Items	Cronbach Alpha
Taste	6	0.868
Time-Saving	6	0.885
Promotion	6	0.884
University Students' Attitudes towards Fast-Food Consumption	6	0.831

Table 4 represents the total result of the reliability analysis of variables between the independent and dependent variables. All independent and dependent variables show the value of items is 0.6, and the correlation in reliability was very good in terms of consistency. So, these values indicate an acceptable level of internal consistency of the items.

Result of Pearson Correlation Analysis

Table 5: Pearson Correlation Analysis

Hypothesis	P-Value	Result (Supported / Not Supported)
H_1 There is a relationship between taste and university students' attitude towards fast food consumption in Malaysia during the recovery period of Covid-19.	r = 0.810, p < 0.01	H_1 is supported.
H_2 There is a relationship between time saving and university students' attitude towards fast food consumption in Malaysia during the recovery period of Covid-19	r = 0.735, p < 0.01	H_2 is supported.
H_3 There is a relationship between promotion attractiveness and university students' attitude towards fast-food consumption in Malaysia during the recovery period of Covid-19.	r = 0.711, p < 0.01	H_3 is supported.

Based on the Table 5, Pearson correlation analysis shows that taste (r = 0.180, p < 0.01), time saving (r= 0.735, p < 0.01) and promotion attractiveness (r = 0.711, p ,0.01) had a strongly positive correlation and supported on university students' attitude towards fast food consumption in Malaysia during the recovery period of Covid-19.

DISCUSSIONS AND RECOMMENDATIONS

This study investigated the elements that positively affect university students' attitudes toward fast food consumption in Malaysia during the recovery period from Covid-19. The result of this study revealed that taste, time-saving and promotion attractiveness have an influence on the university students' attitude toward fast food consumption in Malaysia during the recovery period of Covid-19. Therefore, the results of this study lead to the conclusion that university students like to consume fast food because it has an excellent effect on their study Based on the study's findings, the current study would provide several recommendations for the future researcher to make this research more interesting. Firstly, to expand the number of languages available for the questionnaire. The questionnaire was written in two languages: Bahasa Malaysia and English. For a broader and better understanding, it would be more advantageous and beneficial if the questionnaire included languages such as Chinese and Tamil.

Next is to grow the scope of study with not only focus on university students' attitude towards fast food consumption but focus on the public of any age dan background. This is because not only children and young people like to eat fast food, but older people also like to eat fast food. Besause eating fast food not only has a bad effect but also a good effect on fast food consumption. For example, eating fast food can make the fast food consumption feel happy and help to descrease stress. Furthermore, it is recommended that future researcher continue using quantitative methods for any future research related to this topic. Because it is much

faster and easier to analyse data than the qualitative method. The quantitative method enables future researchers to conduct this study on a larger population. However, future research can still use this data and study to guide developing a more developed researcher and exciting study. Other than that, these research findings are also recommended for the Fast Food industry to provide bouncer or package meals for students. So, for that, it can help the student save their money to buy fast food meals, and it also will make there happy, also help the Fast Food industry increase their income.

CONCLUSION

In conclusion, this study has explained the factors that influence university students' attitudes towards fast food in Malaysia during the recovery period from Covid-19. The study reveals that taste, time-saving and promotion attractiveness are essential factors considered by university students regarding fast-food consumption. This research provides an opportunity to understand the key influences on food choice during the Covid-19 recovery period.

REFERENCES

Akhter, M. M. (2019). Consumer Attitude toward Fast Food Consumption: A Study on University Students in Dhaka City. *Asian Journal of HUmanity, Art and Literature*.

Ben Hassen, T., El Bilali, H., Allahyari, M. S., Berjan, S., & Fotina, O. (2021). Food purchase and eating behavior during the COVID-19 pandemic: A cross-sectional survey of Russian adults. *Appetite*, *165*(May), 105309

Blešić, I., Popov-Raljić, J., Pivac, T., & Ivkov, M. (2018). Factors influencing students' choice of fast food restaurants. *Ekonomika Poljoprivrede*, *65*(1), 257–268.

Ebadi, L., Rakhshanderou, S., & Ghaffari, M. (2018). Determinants of Fast Food Consumption among Students of Tehran: Application of Planned Behavior Theory. *International Journal of Pediatrics-Mashhad*, *6*(10), 8307–8316.

Gerritsen, S., Sing, F., Lin, K., Martino, F., Backholer, K., Culpin, A., & Mackay, S. (2021). The Timing, Nature and Extent of Social Media Marketing by Unhealthy Food and Drinks Brands During the COVID-19 Pandemic in New Zealand. *Frontiers in Nutrition*, *8*(March), 1–13.

Ghoochani, O. M., Torabi, R., Hojjati, M., Ghanian, M., & Kitterlin, M. (2018). Factors influencing Iranian consumers' attitudes toward fast-food consumption. *British Food Journal*, *120*(2), 409–423.

Jashari, A., & Kotsios, P. (2019). Greek Consumers' Behaviour Towards Fast-Food Consumption. *International Journal of Marketing Studies*, *11*(3).

Khongrangjem, T., Dsouza, S. M., Prabhu, P., Dhange, V. B., Pari, V., Ahirwar, S. K., & Sumit, K. (2018). A study to assess the knowledge and practice of fast food consumption among Pre-University students in Udupi Taluk, Karnataka, India. *Clinical Epidemiology and Global Health*, *6*(4), 172–175.

Koh, D. (2020). COVID-19 lockdowns throughout the world. *Occupational Medicine*, *70*(5), 322.

Lemia, Shaban, A. D. (2019a). Trends in Fast-Food Consumption Among Kuwaiti Youth. *International Journal of Preventive Medicine*, *10*(44), 1–7.

Man, C. S., Hock, L. K., Ying, C. Y., Cheong, K. C., Kuay, L. K., Huey, T. C., Baharudin, A., & Aziz, N. S. A. (2021). Is fast-food consumption a problem among adolescents in Malaysia? An analysis of the National School-Based Nutrition Survey, 2012. *Journal of Health, Population and Nutrition*, *40*(1), 1–9.

Mokhtar, M., Yusoff, S., & Muhamad Murad, N. A. (2020). The Prevalence of Fast Food Consumption Among Undergraduates: Evidence from Malaysia. *Advances in Business Research International Journal*, *6*(2), 133.

Powell, P. K., Lawler, S., Durham, J., & Cullerton, K. (2021). The food choices of US university students during COVID-19. *Appetite*, *161*(July 2020), 105130.

Shamsi, M. S., & Khan, M. A. (2017). International Conference on 'Research and Business Sustainability' 4. *Research and Business Sustainability*, *January 2018*.

Syafiqah, I. N., Riza, N., Chik, A., Zm, L., Syafiqah, I. N., Normala, R., Azlini, C., Lukman, Z. M., & Kamal, M. Y. (2018). Fast Food Consumption Behavior among University Students. *International Journal of Research and Innovation in Social Science (IJRISS) |Volume*, *II*(November 2019), 2454–6186.

Xiao, A., Yang, S., & Iqbal, Q. (2018). Factors Affecting Purchase Intentions in Generation Y: An Empirical Evidence from Fast Food Industry in Malaysia. *Administrative Sciences*, *9*(1), 4.

Alom, S., Patwary, A. K., & Khan, M. M. H. (2019). Factors affecting the turnover intention of Bangladeshi migrants in the United Arab Emirates: An empirical study on the hotel industry. International Journal of Innovation, Creativity and Change, 8(3), 344-360.

Patwary, A. K. (2022). Examining environmentally responsible behaviour, environmental beliefs and conservation commitment of tourists: a path towards responsible consumption and production in tourism. Environmental Science and Pollution Research, 1-10.

Patwary, A. K., & Rashid, B. (2016). The impacts of hospitality services on visit experience and future visit intention of student travelers. International Journal of Business and Technopreneurship, 6(8), 107-125.

Patwary, A. K., Omar, H., & Tahir, S. (2020). A conceptual model of what influences consumers when visiting green hotels in Malaysia. International Journal of Innovation, Creativity and Change, 11(11), 11-25.

Patwary, A. K., Rasoolimanesh, S. M., Rabiul, M. K., Aziz, R. C., & Hanafiah, M. H. (2022). Linking environmental knowledge, environmental responsibility, altruism, and intention toward green hotels through ecocentric and anthropocentric attitudes. International Journal of Contemporary Hospitality Management, (ahead-of-print).