RESEARCH PAPER

Consumers Satisfaction Towards e-Hailing Food Delivery Services During Movement Control Order Period: A Case Study in Selangor

Nasrudin Md Rahim^{1*}, Nur Fatin Anis Mohd Yunus²

^{1,2}Department of Science and Biotechnology, Faculty of Engineering and Life Sciences, Universiti Selangor, 45600, Bestari Jaya, Selangor, Malaysia

*Corresponding author: nasrudin@unisel.edu.my

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Abstract

The Malaysian government had decided to imposed on the Movement Control Order (MCO) starting from 18th March 2020 in order to break the chain of Covid-19 pandemic in the country. As such, people were encouraged to use e-hailing delivery services when ordering foods. As a result, the number of food delivery services had increased since then. This study was conducted to investigate the consumers satisfaction level towards e-hailing food delivery services in Selangor during the MCO period. An online survey was conducted among 220 customers who used e-hailing food delivery services during the MCO. The data was then analysed using Statistical Analysis System (SAS) OnDemand for Academics software. The results showed that the level of satisfaction among consumers was high ($\bar{x} = 3.30/4.00$). The mean score for the factors that contributed to the satisfaction was also high such as service quality ($\bar{x} = 3.25/4.00$), food quality ($\bar{x} = 3.25/4.00$) and price ($\bar{x} = 3.01/4.00$). The finding also showed that there exist significance correlation between consumers satisfaction and service quality (r = 0.75), food quality (r = 0.68) and price (r = 0.50). As a conclusion, since e-hailing food delivery services already established in Malaysia long before MCO, consumers were satisfied with the services even during the MCO. Furthermore, despite increasing number of orders during MCO, it showed that the services still maintaining the quality of the service, food quality and also the price.

Keywords: e-hailing, food delivery, movement control order, satisfaction

INTRODUCTION

In this growing world of technology, e-hailing food delivery has become an important element of people's life. Kimes (2011) suggested that the amount of increase in e-hailing food ordering is because of convenience and control, this is because it is easier to order our meals or snacks and saves time. Das (2018) stated that the doorstep delivery is the most highly ranked factor of influencing the consumers to use the food ordering applications. The consumers are also often influenced by discounts and cash back offer. Nowadays, most people do not like waiting in the line at restaurants just for food due to their hectic lifestyle. They would prefer that food comes to them without much effort and to be delivered as fast as possible (Yeo, et al., 2017). According to Chavan, et al. (2015), the utilization of smart device based interface for consumers to look at, order and navigate has helped the restaurants in managing orders from customers immediately. The capabilities of wireless

communication and smart phone technology helped in fulfilling and improving business management and repair delivery. Their analysis states that this technique is convenient, effective and straightforward to use, which is predicted to enhance the general restaurant business in the future.

During the Covid-19 pandemic outbreak, there was an increase in demand for food and grocery deliveries. This is because of limitation of the movement and social distancing awareness. Based on Dang, et. al. (2018), internet has played a major role in increasing the awareness of the e-hailing food delivery applications. As for the pandemic awareness, the contactless delivery is important in order to ensure safety and hygiene. According to a report in Malay Mail (Jun, 2020), riders were taking precaution while delivery the foods to reduce the risk of infection. Furthermore, most of the vendors prepared a hand sanitizer for the riders before they picked up the food. This will gain the customers trust and were not in doubtful to order their foods again in the future.

Apart from e-hailing food delivery services such as Foodpanda, GrabFood, Dahmakan and others, restaurants also take the chances to deliver their foods themselves such as Sushi King, KFC, McDonald and Pizza Hut which using their own platforms. E-hailing food delivery services are always chosen by Malaysian based on their satisfactions. People will mainly search for the price, the service quality and the food quality. These are important as people tend to find cheap yet good food, satisfying service from companies and hygiene food to sustain their health during the Covid-19 pandemic outbreak. According to Gizaw and Nguyen, (2014), consumer's satisfaction is highly important in growing people interest to use the particular e-hailing food delivery services repetitively. Thus, the companies will have regular customers that trust them and willing to support the business as they are satisfied with the quality of the e-hailing food delivery services.

Companies need to understand the quality of their service. This is needed to help them achieve customers satisfaction. Food quality is related to satisfaction with fast-food restaurants (Kivela et al., 1999; Law et al., 2004). Quality has been defined as "fitness for use" and "those products that meet consumer needs and thereby provide consumer satisfaction" (Juran and Godfrey, 1999). According to Andaleeb and Conway (2006) the price of the product of goods will affect the consumers satisfaction. Based on the findings by Yusof et al., (2016), a correlation test has been set up to determine the correlation between consumers satisfaction and service quality, food quality, the price towards e-hailing food delivery services. The correlation value states that there is a strong relationship among them.

Apart from the positive sides of e-hailing food ordering, there were some consumers who experiencing bad experience due to Covid-19 pandemic outbreak either on food quality, efficiency of times and the accessibility of e-hailing ordering system. This might hinder the consumer from ordering from the same e-hailing food services.

Consumers are used to be concerned at times regarding the quality of food that is being provided by the e-hailing food delivery services. Some of the foods might consider as a good quality, but some will consider as bad. The food quality is the quality characteristics of food that is acceptable for consumer. This includes the way of the packaging of the foods, the freshness, well presented and others. In this case, when the consumers are satisfied, they will purchase again. In the other way around, when consumers are not satisfied with the quality of foods, their perception towards e-hailing food delivery service might turns to negative thus they will turn their back against the company and it will results the company to lose their customers.

We know that e-hailing food delivery services always brag themselves about punctuality of delivering customers foods, however some of them cannot fulfil their promises due to unexpected and unavoidable reasons such as roadblocks in every place due to Movement Control Order (MCO). Consumers who are expected their foods to be delivered on time will get upset because they need to wait a little more time to receive their foods. There is less of a chance of using the same service in the future. The sudden increase of orders due to Covid-19 outbreak can be one of the problems too. This is because some systems of e-hailing food delivery applications were not designed to manage such capacity and unable to handle multiple orders at a time which causes bad services for consumers. They would get frustrated while trying to order their foods when the applications were continuously buffering. It may cause a bad reputation to the company and can harm their sales as well. Worst case scenario, the services would get a bad feedback and review from the consumers and this might lead to a decrease number of customers and can also led to the fall for the e-hailing food delivery services.

Because of the above mentioned situations, this study was conducted to achieve the following objectives,

- a) To discover the most preferred e-hailing food delivery service portal and provider.
- b) To identify the factors that influence the consumers to order e-hailing food delivery services.
- c) To identify the correlation between consumers satisfaction and service quality, food quality, the price of e-hailing food delivery services.

MATERIALS AND METHODS/ METHODOLOGY

Instrumentation

A pre-determine answer type of questionnaire was used in this study. The questionnaire consisted of four sections: Section A, Section B, Section C and Section D which consisted of 38 questions. Section A consisted of demographic questions. The needed information were age, gender, race, income and district in Selangor. Section B consisted of general information related to the topic: which platform you use when ordering food through e-hailing, which e-hailing food services do you prefer, how often you order e-hailing food, what factor that influence you to order e-hailing food delivery services. Section C consisted of questions related to consumer overall satisfaction towards e-hailing food services. Section D consisted questions on factors of consumer satisfaction towards e-hailing food delivery services and was divided into three factors which were service quality, food quality and the price. The questionnaire used multiple choices (Section A and B) and Likert scale (Section C and D). The Likert scale used the four points scale which were Strongly Disagree (1), Disagree (2), Agree (3), Strongly Agree (4).

Data Collection

This research had been carried out with a total of 220 sample from 6.53 million population across the state of Selangor. The margin of error with the number of sample selected is 6.61% which is still considered small even though it is more than 5%. The collection of the data was through online survey using Google Form. The convenience sampling technique was used in the collection of the data where the link of the questionnaire was posted online on social media such as WhatsApp and Facebook. This technique is suitable to be used due to the Movement Control Order implementation. The personal information of the

respondents is kept confidential and will not be revealed under any circumstances. The survey also included a clear guidance on how to answer it.

Analysis of Data

The data collected was analysed using Statistical Analysis Software (SAS) OnDemand for Academics. Pearson correlation coefficient analysis was used to test on the correlation of the factors tested. All significance tests used level of significance (α) of 0.05.

RESULTS AND DISCUSSION

Reliability Test

The consistency of each statement of variables in Part C (Customers Satisfaction) and Part D (Factor of Satisfaction) was checked by using reliability test. The questionnaire is acceptable and reliable if the value of Cronbach's Alpha is 0.6-0.7 and if 0.8 or greater, it is considered as a very good level of reliability as suggested by Hulin, Netemeyer and Cudeck (2001). As can be seen from the Table 1, all values are above 0.80 thus it can be concluded that the questionnaire was reliable and acceptable.

Table 1. Reliability Test

Tuble 1: Remaining Test				
Variables	Item	Cronbach Coefficient Alpha		
Consumers Satisfaction	5	0.82		
Service Quality	7	0.82		
Food Quality	7	0.89		
The Price	7	0.86		

Background of Respondents

Majority of the respondents participated in this study were female (60.9%) as compared to male (39.1%). Based on the age breakdown, majority of the respondents were those of Generation Y (age 20 to 29 years old) as compared to other age groups. Due to the younger group participated in the study, the income breakdown can also be seen mostly under RM1000 (60.5%) or between RM1001 to RM1999 (29.5%). Representative from all nine districts in Selangor participated in this study. Other breakdown of the respondents' background can be seen in Table 2.

Table 2. Demographic of respondents

Demographic Demographic	Number of Percent (%)	
	Respondents	
Gender		
Male	86	39.1
Female	134	60.9
Age		
Below 20	28	12.7
20-29	180	81.8
30-39	5	2.3

40-49	6	2.7
50 and above	1	0.5
Race		
Malay	205	93.2
Chinese	4	1.8
Indians	8	3.6
Others	3	1.4
Monthly Income		
Below RM1000	133	60.5
RM1000-2999	65	29.5
RM3000-4999	11	5.0
RM5000 and above	11	5.0
District		
Klang	40	18.2
Petaling	60	27.3
Sepang	4	1.8
Kuala Selangor	18	8.2
Sabak Bernam	2	0.9
Hulu Langat	11	5.0
Kuala Langat	4	1.8
Hulu Selangor	9	4.1
Gombak	72	32.7

Findings

Respondents were asked to choose up to two most used platforms when ordering food through e-hailing. It was clearly seen that the mobile technology had become more popular these days as it was chosen as the most platform used. A total of 186 (84.6%) of the respondents chose this platform to order food delivery through e-hailing. This followed by social media platforms (WhatsApp, Twitter, Facebook and Instagram) and direct call to the restaurant with 97 (44.1%) respondents each. The least favourite platform used was through the website itself whereby only 34 (14.4%) respondents chose this platform. This is similar to the finding by Hanafi, Samsudin and Zalay (2015) in their research where respondents felt that using mobile phones was more ease to use as compared to using computer platform as shopping aid.

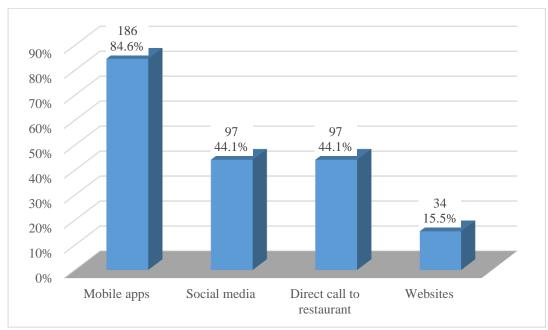


Figure 1. Platform of ordering e-hailing food delivery

It was clearly seen that Foodpanda and GrabFood were the most popular services used by the respondents when ordering food through e-hailing. A total number of 160 (72.7%) respondents used Foodpanda and 139 (63.2%) respondents used GrabFood. Meanwhile restaurant delivery services such as McDelivery (24.1%), KFC Delivery (17.3%) and PizzaHut Delivery (16.4%) were still used by some of the respondents even though it were not as popular as Foodpanda and GrabFood.

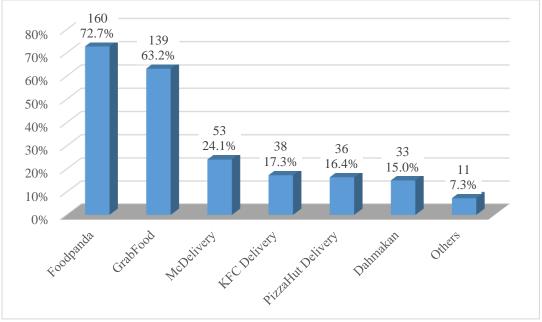


Figure 2. Service used when ordering food through e-hailing

A split answer was given on the frequency of ordering food through e-hailing. Most of the respondents either ordered food through e-hailing once to three times a week (36.4%) or less than once every two weeks (30.9%) as shown in Figure 3.

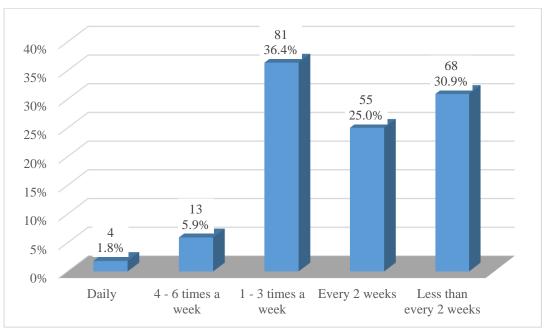


Figure 3. Frequency of ordering food through e-hailing

Easy and convenient was the main factor why the respondents chose e-hailing food delivery services. A total number of 140 (63.6%) respondents gave this reason. Other highly contribution factors that contributed to the reason for using the e-hailing service were the variety of foods (37.7%) and discount given (36.8%).

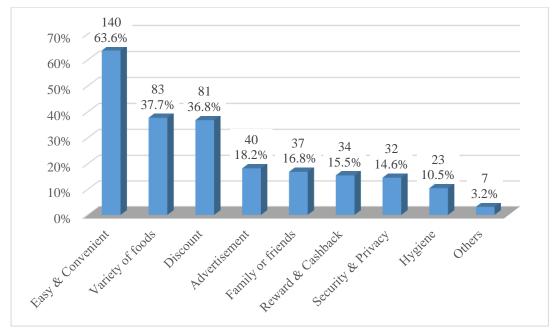


Figure 4. Factor of ordering food through e-hailing

The mean score was calculated to identify the level of customers satisfaction, service quality, food quality and the price. The score of the mean was interpreted as suggested by Wiersma (2000): 1.00-2.00 as low, 2.01-3.00 as moderate and 3.01-4.00 as high. As shown in Table 3, the mean for all factors are ranging from 3.01 to 3.30 which means that the satisfaction level was high. The overall consumers satisfaction scored 3.30 while service

quality and food quality equally scored 3.25. The price scored the lowest at 3.01 but still considered as high.

Table 3. Satisfaction level

Factor	Mean	Standard Deviation	Interpretation
Consumers Satisfaction	3.30	0.49	High
Service Quality	3.25	0.47	High
Food Quality	3.25	0.50	High
The Price	3.01	0.54	High

Table 4 shows the relationship between customers satisfaction and service quality, food quality and the price. The value of the correction showed there exist a strong correlation of customers satisfaction with service quality (0.75) and food quality (0.68). Meanwhile the correlation between consumers satisfaction and the price was considered weak since the correlation value was 0.50. Therefore, it can be concluded that the price was not the main contribution to the satisfaction level of the consumers.

Table 4. Correlation between satisfaction level and factors

Factor	Pearson Correlation (<i>r</i>)	p-value
Consumers Satisfaction vs Service Quality	0.75	<.0001*
Consumers Satisfaction vs Food Quality	0.68	<.0001*
Consumers Satisfaction vs The Price	0.50	<.0001*

Note: *exist significance correlation at $\alpha = 0.05$.

The following null hypothesis was tested,

 H_0 : There is no correlation between consumers satisfaction with service quality, food quality and the price.

H₁: There is a correlation between consumers satisfaction with service quality, food quality and the price.

Since the p-value for all factors were less than 0.05, it proved that there exist a significance correlation between consumers' satisfaction with service quality, food quality and the price.

CONCLUSION

The first objective was to determine the most preferred e-hailing food delivery service portal and provider by consumer. Based on the result, consumers were more likely to use mobile phone as the preferred portal and choose Foodpanda followed by GrabFood and McDelivery as the preferred provider.

Next objective was to identify factors that influence consumers to use e-hailing food delivery services. From the findings, consumers were most influenced by ease and convenient. They are also influenced by variety of foods and advertisements.

The last objective was to identify the correlation between consumers satisfaction and service quality, food quality and the price towards e-hailing food delivery services. Based on Pearson correlation coefficient analysis, there was enough evidence to conclude that there exists a correlation between consumers satisfaction and service quality, food quality and the price. The result showed that there was a strong positive correlation relation between

consumers satisfaction with service quality and food quality. The consumers were highly satisfied with the service quality and food quality of the e-hailing food delivery services.

As an overall conclusion, it can be concluded that despite the increase in orders during the MCO, the e-hailing food delivery services still able to maintain the satisfaction among the consumers as before.

REFERENCES

- Andaleeb, S.S., & Conway, C. (2006). Customer satisfaction in the restaurant industry: an examination of the transaction-specific model. *Journal of Services Marketing*, 20(1), 3-11.
- Borgohain, M. (2019). Consumer perception towards food delivery applications with special reference to Dibrugarh Town. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(4), 10137-10141.
- Chavan, V., Jadhav, P., Korade, S. & Teli, P. (2015). Implementing customizable online food ordering system using web based application. *International Journal of Innovative Science, Engineering & Technology*, 2(4), 722-727.
- Dang, A.K., Tran, B.X., Nguyen, C.T., Le, H.T., Do, H.T., Nguyen, H.D., Nguyen, L.H., Nguyen, T.H., Mai, H.T., Tran, T.D., Ngô, C., Vu, T.T., Latkin, C., Zhang, M.W., & Ho, R. (2018). Consumer preference and attitude regarding online food products in Hanoi, Vietnam. *International Journal of Environmental Research and Public Health*. 15.
- Das, J. (2018). Consumer perception towards 'online food ordering and delivery services': An empirical study. *Journal of Management (JOM)*, 5(5), 155-163.
- Gizaw, A & Nguyen, T.H. (2014). Factors influencing consumer purchasing decision of private label. *School of Business, Society and Engineering*, 1-84.
- Hanafi, H., Samsudin, K., Said, C., & Zalay, A. (2015). Perceived Benefit, User Satisfaction And Ease of Use of Mobile Augmented Reality (MAR) Shopping Aid. *International Business Education Journal*, 8(1), 30-38.
- Hulin, C., Netemeyer, R., and Cudeck, R. (2001). Can a reliability coefficient be too high? *Journal of Consumer Psychology*, Vol. 10(1), 55-58.
- Jun, S.W. (2020, Feb 20). In wake of Covid-19 outbreak, food deliveries go up in Kuala Lumpur with riders extra vigilant about hygiene. Malay Mail, Retrieved from https://www.malaymail.com
- Juran, J.M., & Godfrey, A.B. (1999). Quality Handbook. 5th Edition. New York: McGraw-Hill.
- Kimes, S.E. (2011). Customer perceptions of electronic food ordering. *Cornell Hospitality Report*, 11(10), 6-15.
- Kivela, J., Inbakaran, R., & Reece, J. (1999). Consumer research in the restaurant environment, Part 1: A conceptual model of dining satisfaction and return patronage. *International Journal of Contemporary Hospitality Management*, 11(5), 205-222.
- Law, A.K., Hui, Y.V., & Zhao, X. (2004). Modeling repurchase frequency and customer satisfaction for fast food outlets. *International Journal of Quality & Reliability Management*, 21(5), 545-563.
- Wiersma, W. (2000). Research Methods In Education: An Introduction. (7th Ed). Boston: Allyn & Bacon.
- Yeo, V.C.S., Goh, S.-K., & Rezaei, S. (2017). Consumer experiences, attitude and behavioural intention toward online food delivery (OFD) services. *Journal of Retailing and Consumer Services*, *35*, 150-162.
- Yusof, Z.S.M., Yusuf, F.M & Yusuf, Y.M. (2016). Determinats towards food delivery service through ecommerce in Pasir Gudang area. *Journal of Modern Education Review*, 6(9), 622-631.