

# Online food ordering & delivery service: A study of satisfaction among students residing in UiTM Pulau Pinang during Movement Control Order (MCO)

Journal of Tourism, Hospitality & Culinary Arts (JTHCA)  
2021, Vol. 13 (3) pp 139-147  
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UiTM Press  
Submit date: 27<sup>th</sup> September 2021  
Accept date: 06<sup>th</sup> December 2021  
Publish date: 30<sup>th</sup> December 2021

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## Proposed citation:

Ahmad Faizar, F., Mohd Ali, N., & Tarmazi, S. A. A. (2021). Online food ordering and delivery service: A study of satisfaction among students. *Journal of Tourism, Hospitality & Culinary Arts*, 13(3), 139-147.

## Abstract

Because of the ease, cost and variety of cuisines offered; the distribution of food service through online food industry has evolved at an unprecedented rate all over the world (Dsouza & Sharma, 2020). In this pandemic, Movement Control Order (MCO) has been provided by the government for citizens to obey. One of the significant services has been food distribution. The MCO has helped to raise customer awareness and acceptance of online food delivery services. However, with the advent of the Online to Offline (O2O) era, the rise of various food delivery platforms not only provides consumers with more choices, but also allows restaurant operators to reach more potential consumers and increase their additional revenue thus; making rooms for research to be done in accessing factors affecting satisfaction level among customers. Thus, the purpose of this study is to investigate the consumers' level of satisfaction towards online food delivery service. A quantitative study has been through with 215 respondents ranging from diploma and degree students' residing in UiTM Permatang Pauh & Bertam campus was chosen as sample. A correlation analysis was conducted to determine the strength of the linear correlation between variables. The finding revealed that quality, price and ease of use have a positive relationship towards satisfaction of using the online food delivery ordering service. From the findings it is often concluded that satisfaction towards the online food delivery services will significantly

vary based from quality of food ordered or received, hygienic value of the delivery process, and price of food ordered online as well as the ease of use of the online food delivery services apps or platform.

### **Keywords:**

Quality, Price, Satisfaction, Ease of use, Food Delivery

## **1 Introduction**

Technology has played a key role in revolutionizing the food delivery service, it has contributed to the changes in consumer preferences as their dependency of technology has motivated them to do everything online comprising getting cooked meals delivered to their doorstep (Prasetyo, Tanto, Mariyanto, Hanjaya, Young, Persada, Miraja, Redi, 2021). Convenience is the prime factor to the consumers, as to place an order is as simple as few clicks on any mobile devices. Nowadays, people especially the university students tend to stay home and browse the website all day long during their leisure time thus, having insufficient time while dealing with tasks in their academic lives (Hooi, Leong & Yee, 2021). New users of online food delivery service (OFDS) apps are mainly attracted by the advantages provided by these apps. Utilizing these apps, customers are able to look up all nearby restaurants, see the menu options, and select the food or beverages that they want. Furthermore, OFDS apps nowadays have also been equipped with digital payment instruments to make purchasing even easier. Because of this new behavior, in order to attract customers and increase brand awareness, many restaurants are available on OFDS apps (Chai & Yat, 2019). However, restaurant availability is not the only factor that influences customer satisfaction when using OFDS apps. Other factors, such as ease of use, navigational design, and performance expectancy, will also influence customer satisfaction. For example, several studies have analyzed factors on consumers' initial app adoption during the early usage of OFDS apps [5–7]. As time goes on, customers become more familiar with these apps—they become adapted to the apps without experiencing technical issues. Additionally, several studies have already discussed behavioral factors that influence customer satisfaction and loyalty towards OFDS apps. Yeo et al. [2017] analyzed convenience motivation, price, and time-saving orientation, as well as hedonic motivation towards OFDS. In addition, Prabowo and Nugroho (2019) discussed prior online purchase experiences as determining factors that influence attitude and behavioral intentions to OFDS. Furthermore, Gunden et al. [10] explained habitual factors that influence one's intentions to use OFDS. Thus, OFDS apps have been an important topic in the past few years.

## **2 Literature Review**

### **2.1 Online food delivery service**

Online food delivery service is convenient and user-friendly than the traditional system because orders placed by customers can be easily viewed and recorded through a mobile application or website (Maimaiti, Zhao, Jia, Ru, and Zhu, 2018). By using online food delivery service to order food, it can enable the university students to reduce time

on finding something to consume (Hooi, Leong & Yee, 2021). Besides, according to Dazmin and Ho (2019), having meal in the physical store is considered as time consuming. Hence, it will affect the intention of university students to use to online food delivery service in their daily life in Malaysia.

The online distribution of food has been on the increase recently because the Malaysian government declared a Movement Control Order (MCO) in Malaysia.

## **2.2 Theory of Technology Acceptance (TAM) Model & Theory of Planned Behaviour (TPB)**

TAM puts forward the perceived ease of use and perceived usefulness as two main factors while trying to explain the attitude directly and behavioral intention indirectly towards using a technology (Davis, 1989). The data analysis revealed that the attitude towards online food ordering vary according to the ease of use of online food ordering process and also vary according to their innovativeness against information technology, their trust in e-retailers and various external influences. The TAM model is appropriate because consumers required to order food online through websites or mobile apps. Hence, quality, price saving and ease of use are the predictors to later study the university students' satisfaction towards online food delivery services. Several studies have utilized the theory of planned behavior (TPB) in the context of OFDS apps. Chai and Yat (2019) utilized the theory of planned behavior to identify several factors (perceived ease of use, time saving orientation, convenience motivation, and privacy and security) towards behavioural intention of online food delivery apps. Furthermore, Yeo, Goh and Rezaei (2017) utilized theory of planned behavior to analyse factors (hedonic motivation, prior online purchase, time saving orientation, and price saving orientation) influencing convenience motivation and post usage usefulness to determine attitude and behavioural intention towards OFDS apps. Despite the availability of existing studies about customer satisfaction and loyalty towards OFDS apps; there is a significant lack of research on addressing OFDS during the COVID-19 pandemic (Prasetyo et al., 2021).

## **2.3 Quality**

The quality of food consists of a complex amalgam of factors and indications (such as physical aspects, composition and microbial characteristics, nutritional value, processing and storage and safety) used by customers to assess food quality, distinguish food products and evaluate the degree of acceptability (Trimigno, Marincola, Dellarosa, Picone & Laghi, 2015). The quality of food just needs to be altered marginally to either increase or decrease the perception of food quality by consumers Michel, Woods, Neuhäuser, Landgraf & Spence, 2015)

## **2.4 Price**

Price, which includes food, tax, and delivery price, can determine customer willingness to pay and their perceptions toward online food delivery services. Customer perceptions toward online food delivery service can be measured by how much money they can save by using it. The more money a customer saves, or the lower the price that the customers

pays, the more the customer tends to perceive that a related service is convenient to use (Prabowo & Nugroho, 2019).

## 2.5 Ease of Use

Perceived ease of use is identified in TAM which highlighted two main cognitive responses in predicting the intention to accept online delivery service (Davis, 1989). He defines PEU as “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989). Another study refers perceived of use as to ease of making orders, choosing food or restaurants and tracking orders (Ray et al., 2019). Several studies highlight the positive influences of perceived ease of use towards online food delivery services (Alagoz & Hekimoglu, 2012; Cho et al., 2019).

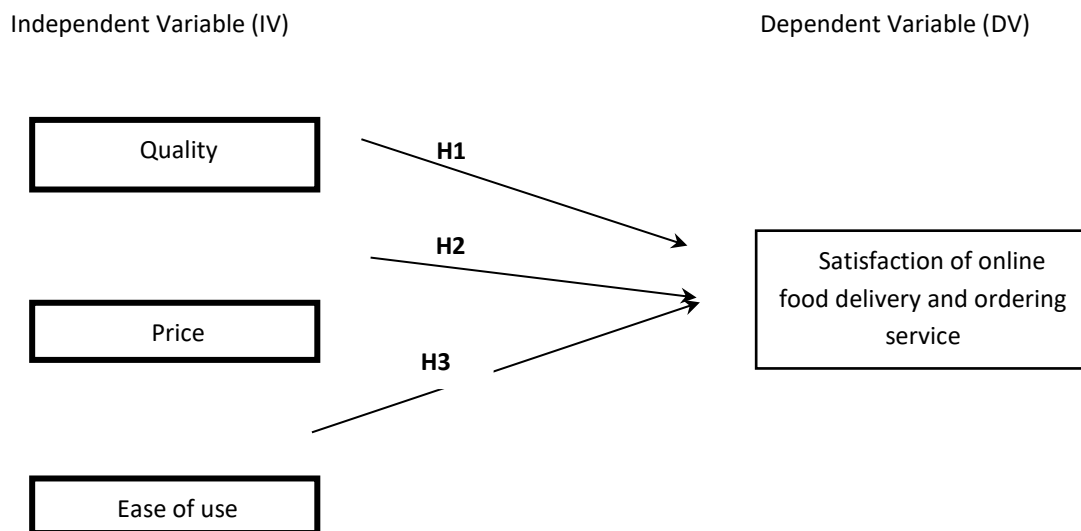


Figure 1: Research framework

## 3 Methodology

### 3.1 Research Design

Quantitative analysis is adapted in this study to look at the connection between students' satisfaction of the online food delivery ordering services while residing in campus during MCO. The study is a cross-sectional study in which data was collected at one point in time.

### 3.2 Population and sample

The respondents for this study were the students residing in Universiti Teknologi Mara (UiTM) Pulau Pinang campuses (Permatang Pauh & Bertam) during MCO. Sampling size was identified from data collected from the Department of Academic Affairs; UiTM

Permatang Pauh. During the data gathering process, a total of 312 questionnaires were completed. A total of 215 people were chosen, with a 69 percent response rate. This information was gathered over two months. Thirty of the 312 questionnaires given are for pilot testing, while the remaining sixty-seven are unsuitable for use since they did not answer the question.

The questionnaire uses multiple item (5-point, Likert-type) scales ranging from strongly agree (5) to strongly disagree (1). Convenience sampling method was employed. Data collection was realized as a field survey where the students were requested to fill in the distributed questionnaires without any incentives. Measure items for the research were selected from prior studies. The questionnaire was composed of 23 closed ended questions. The opening questions were asked to see whether the subject had ever ordered food online, and if so, its quantile.

### 3.3 Data Collection

All responses were collected by distributing questionnaire surveyed via online Google Form. The online questionnaire was distributed to diploma and degree students residing in Universiti Teknologi Mara (UiTM) Cawangan Permatang Pauh and Bertam during the MCO period to assess their satisfaction level of the online food delivery ordering services (OFDO).

## 4 Findings

### 4.1 Result and analysis

#### 4.1.1 Demographic Profile

In this study, a total of 215 (67.9%) female respondents and 69 (32.1%) male respondents were able to participate. The majority of the respondents were from the age group 21-25 years old, with 149 respondents (69.3%). Most of the respondents who participate in this study were degree holders with 125 respondents (41.4%). The majority of the respondents were students from Faculty of Hotel and Tourism Management, with 101 respondents (47%). Table 1 shows the demographic profile of the respondents.

Table 1: Demographic profile

Measure	Items	Frequency	Percentage (%)
Gender	Male	69	32.1
	Female	146	67.9
Age	20 years old and below	63	29.3
	21-25 years old	149	69.3
	26-40 years old	3	1.4
Education Level	Diploma	89	41.4
	Degree	125	58.6

Faculty	Hotel & Tourism	101	47.0
	Civil Engineering	35	16.3
	Electrical & Electronic	34	15.8
	Chemical	10	4.7
	Mechanical	18	8.4
	Pharmacy	7	3.3
	Health Science	10	4.7

Note: N = 215

#### 4.1.2 Reliability Analysis

Table 2 illustrates Cronbach's alpha coefficient scores for the variables employed in this study. Based from the 215 samples, the quality subscale consisted of 10 items was found to be acceptable ( $\alpha = .753$ ). Meanwhile, price having 4 items was found to be acceptable ( $\alpha = .626$ ). Ease of use subscale consisted of 3 items also was found to be acceptable ( $\alpha = .693$ ). Lastly, satisfaction is subscale consisted of 6 items was also found to be acceptable ( $\alpha = .789$ ). The mean scores for ease of use ( $M = 4.20$ ,  $S.D = 0.55$ ) and satisfaction ( $M = 4.15$ ,  $S.D = 0.49$ ) are above 4.00 which considered as high. Quality ( $M = 3.94$ ,  $S.D = 0.44$ ) and price ( $M = 3.93$ ,  $S.D = 0.52$ ) also stated a high mean score which indicate as relevance in assessing students' satisfaction.

Table 2: Cronbach's alpha coefficient scores for the variables

	Variables	Cronbach's Alpha	Mean	SD	No. of Items
QS	Quality	0.753	3.94	0.44	10
PS	Price	0.626	3.93	0.52	3
ES	Ease of use	0.693	4.20	0.55	3
SS	Satisfaction	0.789	4.15	0.49	6

4.1.3 Note: N = 215

#### 4.1.4 Pearson Correlation Analysis

A Pearson correlation coefficient was used to measure the relationship between variables. Based from the result, there was a strong positive correlation between quality and students' satisfaction ( $r = .550$ ,  $n = 215$ ,  $p < 0.01$ ). Customer expectations of quality have been studied extensively since perceived quality is a significant predictor of consumer decision-making and frequently impacts satisfaction or future actions (Wong & Sohal, 2003). Customers' perceptions of value may have a big impact on their experiences which is later concurred by Namkung and Jang (2007) whereby a favourable relationship between meal quality and satisfaction has been demonstrated as a factor that influences a customer's potential intentions. Having said that; it can be concluded that there is a positive relationship between quality of food delivery services towards customers' satisfaction.

Next, there was a moderate positive correlation between price and students' satisfaction ( $r = .499$ ,  $n = 215$ ,  $p < 0.01$ ). This is due to the factor that price is an essential factor in customer interactions; which as a result, it has a major impact on consumer service purchase decisions (Herrmann et al., 2007). Consumer satisfaction may be defined as a customer purchasing and paying for meals from a food delivery service which in the service business means; price has a significant impact on satisfaction.

Moreover, there was a moderate positive correlation between ease of use and satisfaction ( $r = .496$ ,  $n = 215$ ,  $p < 0.01$ ). The correlation analysis supports that the ease of use of the online food delivery ordering services have a significant positive relationship with students' satisfaction. This is in accordance to Kang and Namkung (2018) which stated that the perceived ease of use and service quality satisfaction have been proven to have a high positive association.

Table 2: Result for Pearson Correlation Analysis

	r-value	Relationship	Hypothesis Decision	Result
Quality to satisfaction	0.550	Strong positive relationship	$p = 0.00 < p = 0.01$	Accepted
Price to satisfaction	0.499	Moderate positive relationship	$p = 0.00 < p = 0.01$	Accepted
Ease of use to satisfaction	0.496	Moderate positive relationship	$p = 0.00 < p = 0.01$	Accepted

## 5 Discussion and Conclusion

Technology has played a key role in revolutionizing the food delivery service as it has contributed to the changes in consumer preferences especially students during the MCO as their dependency of technology has motivated them to do everything online comprising getting cooked meals delivered to their doorstep. As students were not allowed to purchase food outside during MCO; the usage of online food delivery services seems like another option for them to get variety for their meal. Convenience is the prime factor to the consumers, as to place an order is as simple as few clicks provided having a strong internet connection. Satisfaction towards the online food delivery services will significantly vary based from quality of food ordered or received, hygienic value of the delivery process, and price of food ordered online as well as the ease of use of the online food delivery services apps or platform. Having said that, this research was grounded to the Theory of Technology Acceptance Model (TAM) which relates closely to the Theory of Planned Behaviour (TPB) that look at the customers' ability & willingness to adapt to the new normal of online food ordering services through apps during this pandemic crisis.

## 6 About the author

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