



INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



Food Quality and Online Food Delivery Services During Covid-19 Pandemic: Are Customers Satisfied?

Nurshaliyana Shasuddin @ Shamsuddin, Nur Syhadah Zakaria, Tuan Ahmad Tuan Ismail

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v13-i5/17045>

DOI:10.6007/IJARBSS/v13-i5/17045

Received: 04 March 2023, **Revised:** 07 April 2023, **Accepted:** 21 April 2023

Published Online: 03 May 2023

In-Text Citation: (Shamsuddin et al., 2023)

To Cite this Article: Shamsuddin, N. S. @, Zakaria, N. S., & Ismail, T. A. T. (2023). Food Quality and Online Food Delivery Services During Covid-19 Pandemic: Are Customers Satisfied? *International Journal of Academic Research in Business and Social Sciences*, 13(5), 433 – 445.

Copyright: © 2023 The Author(s)

Published by Human Resource Management Academic Research Society (www.hrmars.com)

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Vol. 13, No. 5, 2023, Pg. 433 – 445

<http://hrmars.com/index.php/pages/detail/IJARBSS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at
<http://hrmars.com/index.php/pages/detail/publication-ethics>



INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



www.hrmar.com

ISSN: 2222-6990

Food Quality and Online Food Delivery Services During Covid-19 Pandemic: Are Customers Satisfied?

Nurshaliyana Shasuddin @ Shamsuddin, Nur Syhadah
Zakaria, Tuan Ahmad Tuan Ismail

Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, 42300 Puncak Alam,
Selangor, Malaysia

Corresponding Author's Email: tuana436@uitm.edu.my

Abstract

This study investigates the relationship between food quality and online food delivery service towards customer satisfaction during the COVID-19 pandemic. The research employed a non-probability sampling technique and a convenience sampling technique. A total of 385 respondents were taken as a sample, and the data was collected through an online questionnaire survey. Statistical Package for Social Science (SPSS) Version 26.0 software was used to determine the study's outcome. To summarize the key characteristics of the collected data, descriptive statistics are employed to analyze the relationship between variables, and a series of analyses were carried out by using Pearson Correlation Coefficient. The findings showed a positive result of food quality and online food delivery services toward customer satisfaction during the Covid-19 pandemic in Bukit Mertajam, Penang. This study met its main objectives by validating that food quality and online food delivery services has a significant influence on customer satisfaction during the COVID-19 pandemic.

Keywords: Food Quality, Online Food Delivery Services, Customer Satisfaction, Covid 19

Introduction

Topics related to changing the business landscape or the new way of doing business have been intensively discussed recently due to the COVID-19 pandemic. During the COVID-19 pandemic, the economic situation's urge for food expediency intensified due to many businesses joining the food delivery service movement. Restaurants either depend on third-party delivery companies or develop their own online ordering system to offer this service to customers. This revolutionary method of conducting business has increased in number, particularly among youthful, busy, and working individuals (Yusra & Agus, 2019) during the COVID-19 pandemic. Online food delivery services (OFD) have aided in advancing consumer preferences. Online food delivery services could be viewed as a quick and convenient method for consumers to order food with a few clicks without visiting the physical restaurant, especially during the

COVID-19 pandemic. Moreover, consumers' dependency on technology has compelled them to do all transactions online, even having cooked food delivered to their doorstep.

Online Food Delivery (OFD) services are a fast-growing platform in the food industry because of their easy access to consumers. Consumers have greatly utilized the OFD services, especially during the recent outbreak of the COVID-19 pandemic, which encourages the public to practise social distancing. The pandemic has reduced the public to dine-in at restaurants, thus making more and more consumers choose OFD. Furthermore, Guan et al (2020) also researched the consequences of OFD on restaurant enterprises predicting that OFD services will become a trend as the customer slowly but surely adapts to the online buying habit and culture. Another research by Prabowo et al (2019) explored the study into the elements that influence OFD services. However, there still is not much research in addressing the level of food quality and customer satisfaction using OFD. Hence, the aspect of OFD to meet customer satisfaction can be studied, and information can be added to the literature.

In line with the preceding notion, issues related to food quality and OFD services are long becoming one of the central issues and attention among researchers (Abdullah et al., 2018; Anaraud, 2020; Aprilivianto et al., 2020; Herawati et al., 2021). Food quality in the context of typical, traditional and physical restaurant services is related to a multidimensional facet that encloses taste, freshness, temperature, and also customer waiting time. Nevertheless, in the context of online food delivery service, this situation might be different compared to traditional or typical physical restaurant service as the customer is not in the restaurant to evaluate the food and worst scenario, food quality may deteriorate in terms of taste, texture and freshness during the delivery if both the food and delivery operator is not prioritising care and proper handling. If this happens, it will also lead to other problems like spoilage or food poisoning, thus will jeopardise customer satisfaction. Besides, it can become additional information for OFD corporations for strategic reference to attract consumers' intention and improve their services. Issues related to food quality for OFD services, particularly for food and beverage delivery, is the food product potentially spoiled during delivery and meals delivered at a sub-optimal temperature that reduces the quality of food products. Aprilivianto et al. (2020) revealed that the perceived ease of use of OFD applications, like long download time and poor website design will limit customer usage. Thus, various aspects shall be studied by OFD providers to meet customer satisfaction. Therefore, this research aims to discover the online food delivery services toward customer satisfaction in Penang during the COVID-19 pandemic. Furthermore, the study also determined the relationship between food quality, service quality, and perceived ease of use with customer satisfaction in food delivery services during the pandemic in Bukit Mertajam, Penang.

Literature Review

Food Quality

According to Abdullah et al (2018), the quality of the food is one of the most important factors in customers' food selection. Customers' assessments of food quality are often based on their expectations and actual consumption experiences. As a result, it is critical to understand how customers perceive and evaluate food quality because their purchasing decisions depend on these assumptions. Based on this knowledge, food quality may be an important factor influencing the consumer's purchase experience (Sjahroeddin et al., 2018). Research done by Chamhuri and Batt (2015) said that food preferences depend on sensory aspects such as taste

and texture, as well as non-sensory characteristics such as health, religion, and ethics. Researchers occasionally include religious markers in food quality variables, such as halal food indicators. After reviewing existing research on food quality, Namkung and Jang (2007) came up with six questions on food quality that did not include religious indicators. Presentation, diversity, a healthier alternative, flavours, freshness, and temperature are all indicators to consider. Sjahroeddin et al (2018) has proven that food quality is the primary factor that results in customer satisfaction. This is because food is the core product of online delivery services that plays the most important role in customer expectations. In other words, customers will prioritise good product quality then only service quality and other factors. Thus, the researchers suggest that the food delivery services provider should put effort into selecting businesses that provide food with high quality.

Perceived Ease of Use of Online Food Delivery Applications

Okumus et al (2018) define it as the degree of ease associated with the use of technology. According to Pitafi et al (2020), perceived ease of use influences users' attitudes and intentions. Moreover, perceived ease of use of OFD applications substantially influences user satisfaction and desire to utilise an information system in the future (Baki et al., 2018). Hansen et al (2018) subsequently reinforce this positive relationship between perceived ease of use of OFD applications and customer satisfaction. According to Hussien & Mansour (2020), perceived ease of use of OFD applications is shown to have a positive relationship with customer satisfaction towards online food delivery services. The research is carried out to examine factors affecting customer satisfaction towards mobile food ordering applications. The research uses a convenient sampling technique to collect data from 171 respondents. Perceived ease of use of OFD applications is proven to positively impact customer satisfaction because the customer will only be satisfied when the minimum mental effort is required to order food delivery. The more convenient the application is, the higher the customer satisfaction.

Customer Satisfaction

Customer satisfaction is defined as the positive or negative feeling of consumers resulting from analyzing the whole buying process from confirming the order (Zhang et al., 2013). Customers are considered satisfied when the actual quality or performance of the product is better than their expectations (Szymanski & Henard, 2001). According to this concept, if customers have a positive experience with online food delivery services that meet or exceed their expectations, they are more likely to be satisfied and encouraged to use them again. As long as customers are satisfied with their experience with online food delivery services, they are expected to remain loyal to the services and intend to use them again in the future (Amoroso & Lim, 2017). According to Gizaw and Nguyen (2014), customer satisfaction is critical in increasing public attention to using certain e-hailing food delivery services regularly. This can enable the firms to have a group of regular customers who trust them. They will also continuously support the business since they are satisfied with the quality of the e-hailing food delivery services. As a result, this enables online food delivery service providers to improve their customer loyalty to ensure long-term goodwill (Rahim & Yunus, 2021). Laran and Espinoza (2004) also support this, who states that customer satisfaction is a significant antecedent variable contributing to consumer loyalty.

Methodology

Research Design

This study is designed as descriptive research that uses quantitative data, aiming to determine online food delivery services toward customer satisfaction during the COVID-19 Pandemic in Penang. According to Goertzen (2017), quantitative research approaches focus on gathering and processing structured data that may be represented numerically. The hypothesis testing procedure is used to explain the relationship between the independent and dependent variables. The independent variables used in this study are food quality, while the dependent variables are customer satisfaction. The quantitative research design in this study is correlational research which uses statistical data to identify the significance of the relationship between two or more variables. For instance, this study wants to explore the nature of the relationship between the determinants of food quality on how it influences customer satisfaction toward online food delivery service during the COVID-19 pandemic in Bukit Mertajam.

Population and Sampling

The population is the whole set of a group that will be examined in ways to construct the research findings. According to the Department of Statistics Malaysia (2021), the population of Penang is around 212,329. The specific target population for this study is the consumer who has experienced ordering online food delivery services in Penang. The scope of the study for this research is individuals who usually order their food to get satisfaction with food quality were categorized by age into young adults at age 18-35 years old. In this study, we have employed a non-probability and convenience sampling techniques for the sampling method. The questionnaire was provided using online messaging applications, specifically WhatsApp and Telegram. The advantages of this strategy are that it is affordable, fast, and effective at gathering data. Using Krejcie and Morgan method (1970), the sample size needed is approximately 385. The sample size should be among consumers who experienced using online food delivery services in Penang. The study findings involving external and internal validity will be improved when sample criteria are carefully chosen. The sample size is the number of selected respondents from the population when the survey questionnaire is distributed.

Data Collection Procedure

This study will use both primary data and secondary data to collect information. Primary data is collected via Google Forms questionnaires, which will be given to our target users using online messaging platforms such as Telegram and WhatsApp. Moreover, the personal information of the respondents is kept with a consent cover letter to secure the anonymity of respondents as part of the research and the data will not be shared under any circumstances. This method was chosen for its cost-effectiveness, easy to construct, and respondents can give more accurate information to the study. Moreover, this study used secondary data related to problems in our study. The article and secondary research material can be found through the E-resources using an online database of PTAR UiTM for students to access all reliable secondary data sources such as articles, journals, and other related papers for research purposes.

Research Instrument

The survey instrument consisted of five sections: A, B, C, D and E; the first section is the demographic profile, followed by the independent and dependent variables. The questionnaire section uses the 5-point Likert measurement scale to collect data by selecting the level of agreement with a statement provided. Respondents have selected the most appropriate answer on a scale of 1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree to indicate the importance ranking of the attribute in the statement.

Findings

A total of 385 respondents were involved in the survey. They are categorised based on gender, age, an area in Bukit Mertajam, level of education, occupation, monthly income, OFD application likely to use, type of meal often ordered, and frequency to use online food delivery service in a month.

Descriptive Results

Based on the gender distribution of 385 respondents, there were 187 males and 198 females. The male respondents represented 48.6% of the total responses, and the female respondents represented 51.4%. The percentage above illustrates that most of the respondents are female compared to male. For frequency of age, the majority of respondents are between 24 to 28 years old, with 116 respondents representing 30.1%, followed by the age group of 29 to 32 years old, with 26.8%. 100 respondents represent 26% of the study from the age range of 18 to 23 years old. The minority of respondents are from the age group 33 to 35, with 66 respondents representing 17.1%.

There are twelve areas of Bukit Mertajam involved in this study. The first area with the highest score is Bandar Perda, with 48 respondents or 12.5%. Second highest is Alma, with 37 respondents or 9.6%. Third area is Kubang Semang, with 35 or 9.1%, followed by Pusat Bandar, with 33 respondents or 8.6%. Fifth area is from Bukit Tengah, with 32 respondents representing 8.3%. Sixth area is from Juru, with 31 respondents or 8.1% followed by Berapit with 30 respondents representing 7.8%. Tanah Liat and Kota Permai had the same number of respondents with 29 or 7.5% followed by Permatang Tinggi and Machang Bubuk where both areas had 28 respondents representing 7.3%. The minority of respondents is from Cherok To'kun with 25 or 6.5%. In terms of education, the majority of the respondents hold a Bachelor's Degree, with 35.1% or 135 participating in this study, followed by 34% Diploma holders, with 131 respondents, and 27.3% or 105 of the respondents are from the SPM level. The minority of respondents has the highest level of education, which is 3.6%, with 14 respondents.

| Monthly Income | | | | | What application are you likely to use? | | | | | | |
|----------------|-------------------|-----------|---------|---------------|---|---------|------------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent | | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Below RM1,000 | 62 | 16.1 | 16.1 | 16.1 | Valid | FoodPanda | 158 | 41.0 | 41.1 | 41.1 |
| | RM1,001 - RM2,000 | 97 | 25.2 | 25.2 | 41.3 | | GrabFood | 112 | 29.1 | 29.2 | 70.3 |
| | RM2,001 - RM3,000 | 96 | 24.9 | 24.9 | 66.2 | | DeliverEat | 55 | 14.3 | 14.3 | 84.6 |
| | RM3,001 - RM4,000 | 91 | 23.6 | 23.6 | 89.9 | | Lalamove | 11 | 2.9 | 2.9 | 87.5 |
| | Above RM4,000 | 39 | 10.1 | 10.1 | 100.0 | | Bungkusit | 48 | 12.5 | 12.5 | 100.0 |
| Total | 385 | 100.0 | 100.0 | | Total | 384 | 99.7 | 100.0 | | | |
| | | | | | | Missing | 999.00 | 1 | .3 | | |
| | | | | | | Total | | 385 | 100.0 | | |

| Gender | | | | | Age | | | |
|--------|--------|-----|-------|-------|-----------|---------|---------------|--------------------|
| | | | | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Male | 187 | 48.6 | 48.6 | 18-23 | 100 | 26.0 | 26.0 |
| | Female | 198 | 51.4 | 51.4 | 24-28 | 116 | 30.1 | 56.1 |
| | Total | 385 | 100.0 | 100.0 | 29-32 | 103 | 26.8 | 82.9 |
| | | | | | 33-35 | 66 | 17.1 | 100.0 |
| | | | | | Total | 385 | 100.0 | 100.0 |

| Area in Bukit Mertajam | | | | | | | | |
|------------------------|---------------|-----|-------|-------|------------------|---------|---------------|--------------------|
| | | | | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Berapit | 30 | 7.8 | 7.8 | Tanah Liat | 29 | 7.5 | 15.3 |
| | Kubang Semang | 35 | 9.1 | 9.1 | Kota Permai | 29 | 7.5 | 31.9 |
| | Bukit Tengah | 32 | 8.3 | 8.3 | Bandar Perda | 48 | 12.5 | 52.7 |
| | Juru | 31 | 8.1 | 8.1 | Pusat Bandar | 33 | 8.6 | 69.4 |
| | Alma | 37 | 9.6 | 9.6 | Permatang Tinggi | 28 | 7.3 | 86.2 |
| | Cherok To'kun | 25 | 6.5 | 6.5 | Machang Bubuk | 28 | 7.3 | 100.0 |
| | Total | 385 | 100.0 | 100.0 | | | | |

| Level of Education | | | | | | | | |
|--------------------|-----------------|-----|-------|-------|--------------|---------|---------------|--------------------|
| | | | | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | SPM | 105 | 27.3 | 27.3 | Diploma | 131 | 34.0 | 61.3 |
| | Bachelor Degree | 135 | 35.1 | 35.1 | Master / PhD | 14 | 3.6 | 100.0 |
| | Total | 385 | 100.0 | 100.0 | | | | |

For monthly income, the majority is in the range of RM1,001 to RM2,000, with 25.2% or 97 respondents. They were followed by the income group with RM2,001 to RM3,000 monthly. This study followed 23.6% of the income group that earned RM3,001 to RM4,000 or 91 respondents. Next, monthly income below RM1,000 with 16.1% or 62 respondents. The minority of respondents with 10.1% or 39 respondents earn more than RM4,000. For choices of which applications are likely to be used, most respondents were inclined to use FoodPanda application with 158 representing 41%. Second highest score is from Grab Food, with 112 respondents or 29.1%. 55 respondents with 14.3% prefer Deliver Eat followed by BungkusIT with 12.5% or 48 respondents. The only one respondent choosing 'others' from the application shows.

WHAT TYPE OF MEAL DO YOU OFTEN ORDER?

| | | | | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|-----|------|------|-----------|---------|---------------|--------------------|
| Valid | Breakfast | 32 | 8.3 | 8.3 | Brunch | 82 | 21.3 | 29.6 |
| | Lunch | 125 | 32.5 | 32.5 | Dinner | 146 | 37.9 | 100.0 |
| | Dinner | 146 | 37.9 | 37.9 | Total | 385 | 100.0 | 100.0 |

HOW MANY TIMES DO YOU USE FOOD DELIVERY SERVICE IN A MONTH?

| | | | | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----|------|------|-------------------|---------|---------------|--------------------|
| Valid | 1-2 times | 154 | 40.0 | 40.0 | 3-4 times | 117 | 30.4 | 70.4 |
| | 3-4 times | 117 | 30.4 | 30.4 | 5-6 times | 62 | 16.1 | 86.5 |
| | 5-6 times | 62 | 16.1 | 16.1 | More than 6 times | 52 | 13.5 | 100.0 |
| | More than 6 times | 52 | 13.5 | 13.5 | Total | 385 | 100.0 | 100.0 |

HOW MANY TIMES DO YOU USE FOOD DELIVERY SERVICE IN A MONTH?

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------|-----------|---------|---------------|--------------------|
| Valid 1-2 times | 154 | 40.0 | 40.0 | 40.0 |
| 3-4 times | 117 | 30.4 | 30.4 | 70.4 |
| 5-6 times | 62 | 16.1 | 16.1 | 86.5 |
| More than 6 times | 52 | 13.5 | 13.5 | 100.0 |
| Total | 385 | 100.0 | 100.0 | |

For the type of meal order, the majority of the respondents prefer to use OFD services during dinner time, with 146 respondents representing 37.9%. Next, respondents prefer to order during lunchtime, with 125 and 32.5%. 82 respondents chose brunch, with 21.3%, followed by breakfast, with 32 respondents and 8.3%.

For the frequency of using OFD services monthly, 154 respondents use online food delivery services 1 to 2 times a month with 40% followed by 3 to 4 times with 117 respondents and 30.4%. 62 respondents are likely to order 5 to 6 times, and 52 use food delivery services more than six times. For the frequency of using OFD services monthly, 154 respondents use online food delivery services 1 to 2 times a month with 40% followed by 3 to 4 times with 117 respondents and 30.4%. 62 respondents are likely to order 5 to 6 times, and 52 use food delivery services more than six times.

Analysis of Food Quality

Table 1

Table 2

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|-----|---------|---------|---------|----------------|
| Food delivered at a good temperature. | 385 | 2.000 | 5.000 | 4.59740 | .578696 |
| Food presentation is visually attractive. | 385 | 1.000 | 5.000 | 4.45714 | .644574 |
| Food delivered is tasty and flavorful. | 385 | 2.000 | 5.000 | 4.54805 | .580412 |
| Food is made from fresh ingredients. | 385 | 2.000 | 5.000 | 4.52987 | .586094 |
| Valid N (listwise) | 385 | | | | |

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|--------|----------------|
| MFoodQuality | 385 | 2.50 | 5.00 | 4.5331 | .40146 |
| Valid N (listwise) | 385 | | | | |

Table 1 shows the magnitude of the mean (4.45 to 4.59), indicating that respondents believe that food quality is related to customer satisfaction towards online food delivery services in Bukit Mertajam. While evaluating the results of the mean score, components of food quality characteristics such as "Food delivered at a food temperature" (M=4.59, S.D=0.57), "Food presentation is visually attractive" (M=4.45, S.D=0.64), "Food delivered is tasty and flavourful" (M=4.54, S.D=0.58), "Food is made from fresh ingredients" (M=4.52, S.D=0.58). Table 2 describes the entire response of respondents regarding food quality on customer satisfaction for online food delivery services in Bukit Mertajam, Penang. The results reveal that the majority of the respondents are virtually in agreement with the item's statement (mean = 4.53), which indicates between 4 and 5 (Strongly Agree). As a result, the level of food quality in the context of online food delivery services is high.

Analysis of Perceived Ease of Use of Ofd Application

Table 3

| Descriptive Statistics | | | | | |
|--|-----|---------|---------|---------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| I can easily find things that I need in an online food delivery application. | 385 | 1.000 | 5.000 | 4.38701 | .619423 |
| I find that online food delivery has an informative button to help me. | 385 | 2.000 | 5.000 | 4.62338 | .555253 |
| I can use various payments to complete a transaction quickly. | 385 | 1.000 | 5.000 | 4.52987 | .586094 |
| I feel the design and position used in online food delivery applications are well organized. | 385 | 1.000 | 5.000 | 4.61039 | .562635 |
| Valid N (listwise) | 385 | | | | |

Table 4

| Descriptive Statistics | | | | | |
|------------------------|-----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| MPEOFDS | 385 | 2.50 | 5.00 | 4.5377 | .38932 |
| Valid N (listwise) | 385 | | | | |

Table 3 shows the magnitude of the mean (4.38 to 4.62), indicating that respondents believe that perceived ease of use of OFD application relates to customer satisfaction toward online food delivery services in Bukit Mertajam, Penang. While evaluating the results of the mean score, components of perceived ease of use of OFD application characteristics such as "I can easily find things that I need in an online food delivery application" (M=4.38, S.D=0.61), "I find that online food delivery has an informative button to help me" (M=4.62, S.D=0.55), "I can use various payments to complete a transaction quickly" (M=4.52, S.D=0.58) and "I feel the design and position used in online food delivery applications are well organized" (M=4.61, S.D=0.56). Table 4 shows the respondents' perceived ease of use of OFD application on customer satisfaction towards online food delivery services in Bukit Mertajam, Penang. The results reveal that most respondents agree (Mean = 4.53), falling between 4 and 5 (Strongly Agree). As a result, the application of online food delivery services has a strong impact on customer satisfaction.

Analysis of Customer Satisfaction

Table 5

| Descriptive Statistics | | | | | |
|--|-----|---------|---------|---------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| I like and enjoy using online food delivery services | 385 | 1.000 | 5.000 | 4.38701 | .619423 |
| I will recommend to others to use online food delivery services. | 385 | 2.000 | 5.000 | 4.62338 | .555253 |
| I am satisfied with the overall service provided by online food delivery services. | 385 | 1.000 | 5.000 | 4.52987 | .586094 |
| I will continue to use online food delivery services in the future | 385 | 1.000 | 5.000 | 4.61039 | .562635 |
| Valid N (listwise) | 385 | | | | |

Table 6

| Descriptive Statistics | | | | | |
|------------------------|-----|---------|---------|--------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| MPEOFDS | 385 | 2.50 | 5.00 | 4.5377 | .38932 |
| Valid N (listwise) | 385 | | | | |

Table 5 shows the magnitude of the mean (4.38 to 4.62), indicating that respondents believe that customer satisfaction has a relation with the customer as a dependent variable toward online food delivery services in Bukit Mertajam, Penang. While evaluating the results of the mean score, components of customer satisfaction characteristics such as "I like and enjoy using online food delivery services" (M=4.38, S.D=0.61), "I will recommend to others to use online food delivery services" (M=4.62, S.D=0.55), "I am satisfied with the overall service provided by online food delivery services" (M=4.52, S.D=0.58) and "I will continue to use

online food delivery services in the future" ($M=4.61$, $S.D=0.56$). Table 6 shows the overall mean score for customer satisfaction towards online food delivery services in Bukit Mertajam, Penang. The results revealed that the majority of the respondents agree (Mean = 4.53), falling somewhere between 4 and 5 (Strongly Agree). As an outcome, it indicates that customer satisfaction is significant to the respondents in Bukit Mertajam, Penang.

Pearson Correlation for Food Quality and Customer Satisfaction

Table 7

| | | FoodQuality | CustomerSatisfaction |
|----------------------|---------------------|-------------|----------------------|
| FoodQuality | Pearson Correlation | 1 | .657** |
| | Sig. (2-tailed) | | .000 |
| | N | 385 | 385 |
| CustomerSatisfaction | Pearson Correlation | .657** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 385 | 385 |

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

Table 7 shows a summarised correlation matrix score for each variable measured. In these results, the Pearson correlation between food quality and customer satisfaction is shown 0.657, which indicates that the relationship between the two variables is in moderate correlation. This shows that food quality has the lowest correlation with customer satisfaction, with 0.657 as the correlation coefficient result. Besides, it shows that the p-value is less than 0.001, which indicates that the result is statistically significant, indicating strong evidence of H1. There is less than 5% probability the null hypothesis is correct.

Pearson Correlation for Perceived Ease of Used and Customer Satisfaction

Table 8

| | | PerceivedEase | CustomerSatisfaction |
|----------------------|---------------------|---------------|----------------------|
| PerceivedEase | Pearson Correlation | 1 | 1.000** |
| | Sig. (2-tailed) | | .000 |
| | N | 385 | 385 |
| CustomerSatisfaction | Pearson Correlation | 1.000** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 385 | 385 |

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

Table 8 shows a summarised correlation matrix score for each variable measured. From the table above, it can be seen that the correlation coefficient (r) is equal to 1.000, which indicates that the strength of correlation between perceived ease of use of OFD applications and customer satisfaction is very strong. Since the p-value is less than 0.001, it shows that the result of this test is statistically significant. We can assume that the perceived ease of use of OFD applications is one of the reasons for customer satisfaction. The higher the quality of perceived ease of use of OFD applications, the more customers will be satisfied with the online food delivery service ($r = 1.000$, $p < 0.001$).

In a nutshell, the findings of the food quality construct and OFD services construct noticeably showed a positive result towards customer satisfaction in Bukit Mertajam, Penang. Thus, the research met its main objectives by validating that food quality, and OFD construct has a significant influence and impact on the dependent variable, which is customer satisfaction. In this scenario, occasionally, online food delivery services shall improve their services by receiving feedback to boost their business by simplifying the perceived ease of use of OFD applications. Furthermore, as online technology changes rapidly, the OFD service provider should adapt and be in line with the changes in order to stay competitive as well as to sustain customer satisfaction and their trust towards OFD services because customers will easily change to other services if the application is old and out-dated. As for the food, quality aspects need to be taken care of by the operator in order to sustain their business. In the food and beverage sector, quality is uncompromised as customers are always searching for good and reliable food to satisfy their taste buds. To summarise, the more delighted a user of online food delivery services is with the quality of their food, service and application, the more likely they are to spend and share their positive views and experiences with their family, friends and other potential users. Thus, this research gives a clearer picture of exploring food quality and online food delivery services toward customer satisfaction during the covid-19 pandemic in Bukit Mertajam, Penang.

Acknowledgment

This study was funded by the Faculty of Hotel and Tourism Research Grant and Ministry of Education, University Teknologi MARA, MALAYSIA

Corresponding Author

Tuan Ahmad Tuan Ismail

Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Puncak Alam Campus, 42300, Selangor, Malaysia.

Email: tuana436@uitm.edu.my

References

- Abdullah, D., Hamir, N., Nor, N. M., Krishnaswamy, J., & Rostum, A. M. M. (2018). Food Quality, Service Quality, Price Fairness and Restaurant Re-Patronage Intention: The Mediating Role of Customer Satisfaction. *International Journal of Academic Research in Business and Social Sciences*, 8(17), 211–226.
- Ahmad, A., & Al-Tit. (2015). The Effect of Service and Food Quality on Customer Satisfaction and Hence Customer Retention. *Asian social science*, 11(23), 129. 10.5539/ass.v11n23p129
- Annaraud, K., & Berezina, K. (2020). Predicting satisfaction and intentions to use online food delivery: What really makes a difference? *Journal of Foodservice Business Research*, 23(4), 305-323.
- Aprilivianto, Sugandini, D., & Effendi, M. I. (2020). Trust, Risk, Perceived Usefulness, and Ease of Use on Intention to Online Shopping Behavior. <https://doi.org/10.5220/0009963302510256>
- Baki, R., Birgoren, D. B., & Aktepe, D. A. (2018). Rahmi, B. A. K. I., Birgoren, B., & Aktepe, A. (2018). A meta-analysis of factors affecting perceived usefulness and perceived ease of use in the adoption of e-learning systems. *Turkish Online Journal of Distance Education*, 19(4), 4-42.

- Chai, L. T., & Yat, D. N. C. (2019). Online food delivery services: Making food delivery the new normal. *Journal of Marketing advances and Practices*, 1(1), 62-77.
- Chamhuri, N., & Batt, P. (2015). Consumer perceptions of food quality in Malaysia. *British Food Journal*. 117. 1168-1187. 10.1108/BFJ-08-2013-0235.
- Chen, M., Hu, M., & Wang, J. (2019, December 11). Food Delivery Service and Restaurant: Friend or Foe? *Social Science Research Network*.
<https://poseidon01.ssrn.com/delivery.php>
- Goertzen, M. J. (2017). Introduction to Quantitative Research and Data. *Library Technology Reports*, 53(4), 12-18.
- Gupta, M. (2019). A Study on Impact of Online Food delivery app on Restaurant Business special reference to zomato and swiggy. *International Journal of Research and Analytical Reviews*, 6(1), 889-893. http://ijrar.com/upload_issue/ijrar_issue_20542895.pdf
- Haghighi, M., Dorosti, A., Rahnama, A., & Hoseinpour, A. (2012). Evaluation of factors affecting customer loyalty in the restaurant industry. *African Journal of Business Management*, 6(14), 5039-5046. 10.5897/AJBM11.2765
- Handoko, L. P. (2016). The effect of product quality and delivery service on online-customer satisfaction in Zalora Indonesia. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 4(1), 1189-1199.
- Hansen, J. M., Saridakis, G., & Benson, V. (2018). Risk, trust, and the interaction of perceived ease of use and behavioral control in predicting consumers' use of social media for transactions. *Computers in human behavior*, 80, 197-206.
<https://doi.org/10.1016/j.chb.2017.11.010>
- Herawati, T., Hidayah, N., & Djakasaputra, A. (2021). The Effects of Perception of Ease, Experience, Company's Reputation, and Cost Effectiveness on Repurchase Intention Among Online-Food-Delivery (OFD) Consumers in Jakarta. *Atlantis Press B.V.*, 174, 88-94
- Hussien, F. M., & Mansour, N. M. (2020). Factors Affecting Customer Satisfaction towards Mobile Food Ordering Applications (MFOAs). *The Scientific Journal of the Faculty of Tourism and Hotels, Alexandria University*, 17(1), 17-35.
- Kant, R., & Jaiswal, D. (2017). The impact of perceived service quality dimensions on customer satisfaction: An empirical study on public sector banks in India. *International Journal of Bank Marketing*, 35(3), 411-430. <https://doi.org/10.1108/IJBM-04-2016-0051>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.
<https://doi.org/10.1177%2F001316447003000308>
- Kwong, G. S., Ryue, N. S., Yi, W. S., & Lily, C. (2017). Outsourcing to online food delivery services: Perspective of F&B business owners. *Journal of Internet Banking and Commerce*, 22(2).
- Leninkumar, V. (2017). The Relationship between Customer Satisfaction and Customer Trust on Customer Loyalty. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 450-465.
- Namkung, Y., & Jang, S. (2007). Does Food Quality Really Matter in Restaurants? Its Impact on Customer Satisfaction and Behavioral Intentions. *Journal of Hospitality & Tourism Research*, 31(3), 387-409.
- Okumus, B., Ali, F., Bilgihan, A., & Ozturk, A. B. (2018). Psychological factors influencing customers' acceptance of smartphone diet apps when ordering food at restaurants.

- International Journal of Hospitality Management*, 72, 67-77.
<https://doi.org/10.1016/j.ijhm.2018.01.001>
- Prabowo, G. T., & Nugroho, A. (2019). Factors that Influence the Attitude and Behavioral Intention of Indonesian Users toward Online Food Delivery Service by the Go-Food Application. *Atlantis Press*, 72, 204 - 210. <https://doi.org/10.2991/icbmr-18.2019.34>
- Prasetyo, Y. T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M. N., Persada, S. F., Miraja, B. A., & Redi, A. A. N. P. (2021). Factors Affecting Customer Satisfaction and Loyalty in Online Food Delivery Service during the COVID-19 Pandemic: Its Relation with Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 76.
- Rahim, N. M., & Yunus, N. F. A. M. (2021). Consumers satisfaction towards e-Hailing food delivery services during Movement Control Order period: A case study in Selangor. *Journal of Science and Mathematics Letters*, 9, 1-9. <https://doi.org/10.37134/jsml.vol9.sp.1.2021>
- Sjahroeddin, F. (2018). The Role of E-S-Qual and Food Quality on Customer Satisfaction in Online Food Delivery Service. *Prosiding Industrial Research Workshop and National Seminar*, 9, 551-558. 10.35313/IRWNS.V9I0.1097
- Suhartanto, D., Helmi Ali, M., Tan, K. H., Sjahroeddin, F., & Kusdiby, L. (2019). Loyalty toward online food delivery service: the role of e-service quality and food quality. *Journal of foodservice business research*, 22(1), 81-97.
- Szymanski, D. M., & Henard, D. H. (2001). Customer satisfaction: A meta-analysis of the empirical evidence. *Journal of the academy of marketing science*, 29(1), 16-35.
- Tech, J. E. T. (2020). The influence of online food delivery service quality on customer satisfaction and customer loyalty: the role of personal innovativeness. *Journal of Environmental Treatment Techniques*, 8(1), 6-12.
- Wei, K. L., & Nurul, S. A. (2020). The Motivation to Adopt E-commerce Among Malaysian Entrepreneurs. *Journal Organizations and Markets in Emerging Economies*, 11(1), 189-202.
- World Health Organization. (2020). Responding to community spread of COVID-19. *Interim Guidance*, 1-6. https://apps.who.int/iris/bitstream/handle/10665/331421/WHO-COVID-19-Community_Transmission-2020.1-eng.pdf
- Yeo, V. C. S. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *Journal of Retailing and Consumer Services*, 35, 150-162. <https://doi.org/10.1016/j.jretconser.2016.12.013>
- Yusof, Z. S. B. M., Yusof, F. B. M., & Yusof, Y. B. M. (2016). Determinants towards Food Delivery Service through E-Commerce in Pasir Gudang Area. *Journal of Modern Education Review*, 6(9), 622-631. <http://www.academicstar.us/UploadFile/Picture/2017-1/201719225352989.pdf>
- Yusra, & Agus, A. (2019). The Influence of Online Food Delivery Service Quality on Customer Satisfaction and Customer Loyalty: The Role of Personal Innovativeness. *Journal of Environmental Treatment Techniques*, 8(1), 6-12.
- Zhang, X., & Xiang, S. (2019). *Learn About Reliability Analysis and Factor Analysis in SPSS With Online Shopping Data (2006)*. SAGE Publications, Limited.