

Non-Quarantined University Students' Perceptions of Food Management during Movement Control Order (MCO)

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Abstract: Malaysia is one of the countries in the world that has declared Movement Control Order (MCO) method to break COVID-19 chain to save the nation from being infected by this contagious outbreak. All learning institutions were ordered to conduct distance learning classes. Students at the residential colleges were involved and were separated into the Quarantined and Non-Quarantined categories and their welfare was taken care of by the university management under the Department of Student Affairs. Subsequently, the food aspect was one of the crucial issues during this phenomenon. Thus, this study was conducted to investigate the Non-Quarantined residential college students' perceptions regarding the management of food during the MCO. This quantitative study was conducted at Universiti Tun Hussein Onn Malaysia (UTHM). A survey was conducted where 520 students responded to the questionnaire distributed via WhatsApp mode. The data were analyzed using descriptive and inferential statistics. The results obtained were analyzed using Statistical Package for The Social Science Version 25.0 (SPSS 25). The findings indicated that majority of the respondents were satisfied with the food provided and there was no significant difference between the perceptions of male and female students towards the university's management in handling food during MCO.

Keywords: Movement Control Order (MCO), University Management, Students' Perceptions, food aspect, Covid-19

1. Introduction

The coronavirus disease 2019 (Covid-19) has become very critical that it was announced as a global pandemic in January 2020 by the World Health Organization (WHO) which aroused global attention [1]. This Covid-19 was first discovered in Wuhan City, China in December 2019. Surprisingly, the actual cause of Covid-19 remains a mystery. Apparently, the initial cases were related to the Huanan Seafood Wholesale Market where wild animals (such as bats) were available for consumption. This disease became very dangerous as it can be transmitted from human to human through respiratory droplets, contact and even via fecal-oral transmission [2-3]. According to the report by WHO [4], the data in 20 January 2020, 282 confirmed cases of Covid-19 have been reported from four countries including China (278 cases including three deaths), Thailand (2 cases), Japan (1 case) and the Republic of Korea (1 case).

In Malaysia, three cases of Covid-19 have been reported in 26 January 2020. Therefore, the federal government of Malaysia implemented Movement Control Order (MCO) under prevention and control of infectious diseases Act 1988 and the police Act 1967 in response to the Covid-19 pandemic on 18 March 2020. Under MCO, all public and private higher education institutions and skills training institutes nationwide were ordered to be closed. The Ministry of Higher Education (MOHE) has instructed all the higher learning institutions to conduct distance learning classes to replace face to face learning sessions. Meanwhile, students at the residential colleges were involved in the lockdown where they were not allowed to leave their premises due to the pandemic. The students' welfare was taken care of by the university management under the Department of Student Affairs where a special task force that was immediately formed including the university staffs and student leadership council.

More than 80,000 students' nationwide living on campus and renting outside were not allowed to return home during MCO period by the Ministry of Higher Education Malaysia (MOHE). This move was implemented as the students were still exposed to the risk of the Covid-19 virus infection. The students were divided into two categories: Quarantined students and Non-quarantined students. Quarantined students were those who had demonstrated the symptoms of Covid-19 such as fever, cough and shortness of breath [5]. The Non-quarantined students were those who did not show symptoms of Covid-19. It was very important to pay attention to the Non-Quarantined students as they were also exposed to the possibility of contracting the virus if careful attention and measure were not taken which were crucial in breaking the chain of this virus to save the nation from being infected by this contagious outbreak. The protection of the students was particularly important. Precautions were necessary to prevent the potential spread of Covid-19 in university settings especially at the residential colleges. Therefore, the university management had to provide basic necessities such as food and drink for the Non-Quarantined students as well.

2. Literature Review

At the end of March 2020, Malaysian government has taken public health and social measures by implementing MCO that affected immediately without any early notice. The purpose of the action was to slow or stop the spread of Covid-19 disease at national or community level. According to New Straits Time online newspaper [6], all the public and private higher education institution in the country were ordered to close in response to the Covid-19 pandemic in Malaysia. During the MCO period, the university students were prohibited from leaving their respective residential colleges and all their welfare were managed by their own residential college. Referring to Maslow's hierarchy of needs [7] as in Figure 1, the needs of lower level have to be satisfied before individuals can attend to the higher level needs.



Figure 1: Maslow's hierarchy of needs [7]

The model consists of five hierarchy level and the lower needs is the physiological need where food is among the biological requirements for human survival. Even though the majority of residential colleges had their own restaurant facilities, due to the MCO period, the restaurants were ordered to close and the students who were locked-down in their residential colleges did not get enough facilities to fulfill their food requirements. Therefore, they were relying on the food supply provided by the respective residential college management.

According to Satter's hierarchy of food needs [8] as in Figure 2, there are six motivating factors related to food intake issues. One of the most important factors highlighted in the model is having enough food. This aspect was also assessed in this study by using the questionnaire that has been developed for data collection.

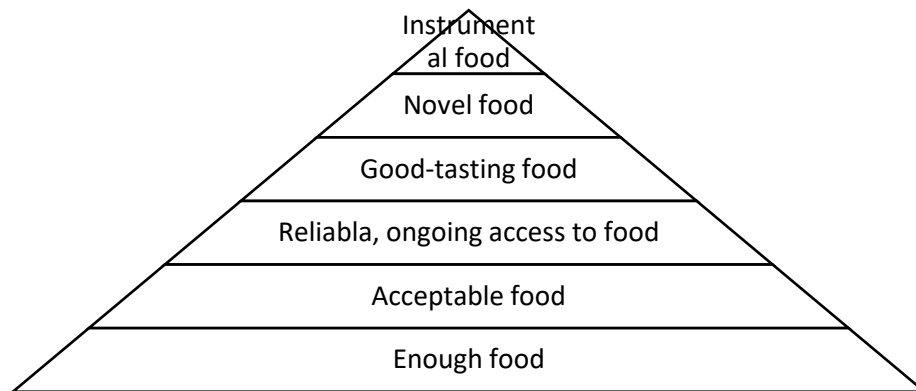


Figure 2: Satter's hierarchy of food needs [8]

Having sufficient amount of food together with adequate nutrients was very important for the university students in order for them to sustain their good health and maintain immune system during critical situations. Looking into the constraints of finding good source of food, the handling of food conducted by the university management should be taken into serious consideration. Thus, this study was conducted to identify the perceptions of the Non-Quarantined students about the management of the university in handling their food during MCO. This study also looked into the perceptions of students based on gender differences to identify if there were any significant differences occurred between the male students' perceptions and the female students' perceptions. The study was important so that the university can be more prepared in future in handling emergency cases.

3. Methodology

The study was carried out using quantitative approach. A survey was conducted to identify the respondents' perceptions regarding the service of food provided by the university management during the MCO period at their premises. The survey was prepared to collect data for the study using a self-developed questionnaire and distributed to respondents via Google Form. The respondents had to answer the questionnaire with four Likert scale: 1=Strongly Not Agree, 2=Not Agree, 3=Agree and 4=Strongly Agree. A total of 520 out of 1021 non-quarantined students staying at eight residential colleges of a public technical university in Malaysia participated in the study

by responding to the questionnaire. The number of sample is sufficient based on Krejcie and Morgan's table [9]. Table 1 below shows the demographical information obtained from the respondents.

Table 1: Respondents' Demographical Information

Demography	N Valid	Missing
Gender	520	0
Religion	520	0
Residential College	520	0
Level of study	520	0
Homestate	520	0
Faculty	520	0

4. Findings and Discussion

This study involved 520 respondents who were the Non-quarantined students who were staying at the university residential colleges during the MCO period carried out in Malaysia. There were 265 (51%) male and 255 (49%) female respondents. The majority of the students were Muslims where there were 341 (65.6%) of them, followed by 113 (21.7%) Christians, 53 (10.2%) Buddhists, 7 (1.3%) Hindus and 6 (1.2%) others. Majority of the respondents were in the degree program which totaled 511 (98.3%) and 9 (1.7%) were in the diploma program. Next, 299 (57.5%) of them were from peninsular Malaysia and 221 (42.5%) of them were from East Malaysia (including the states of Sabah and Sarawak). The six main aspects related to food that were identified in the questionnaire included portion, variety of menu, balanced diet, drinking water supply, delivery schedule, and distribution procedure. All the items were analyzed using SPSS version 25.

The mean presents the perceptions of students towards each of the element listed and the overall mean. The mode is the score that is repeated more often compared to any other score. Thus, the data from mode will show the majority scores provided by the participants for each element. The average mean score obtained for each aspect is provided in Table 2 below.

Table 2: Mean score according to aspects in the Questionnaire

Aspects	N	Mean Score	Mode
Portion	520	4.07	5
Variety of menu	520	3.66	4
Balanced Diet	520	3.51	4
Drinking Water Supply	520	3.90	5
Delivery Schedule	520	3.99	4
Distribution procedure	520	4.09	4

Based on Table 2, the mean scores of the six aspects from the highest to the lowest score: distribution procedure (4.09); portion (4.07); delivery schedule (3.99); drinking water supply (3.90); balanced diet (3.51); variety of menu (3.66). The analysis conducted using SPSS 25 shows that the mean score for the highest aspect was on the food distribution procedure provided to the non-quarantined students during the Covid-19 crisis.

The mode of the elements of portion and drinking water supply value is 5 as shown in Table 2. This means most of the students strongly agree that the portion of food and drinking water supplied by management were sufficient. The mode for the elements of variety of menu, balanced diet, delivery schedule and distribution procedure are 4. This shows most of the students also agree that the above-mentioned services provided by the university management were adequate. The standard deviation from this study is highlighted in Table 3 below.

Table 3: Overall mean score for Food Management

Aspect	N	Mean Score	Standard Deviation (SD)
Food	520	3.87	0.77

The standard deviation refers to the difference of each value that deviates from mean score [10]. It is used to compare the consistency of score towards the overall mean. Based on Table 3, the SD value shows that the overall data consistently scattered between 3.10 and 4.67 around the mean score, 3.87. Therefore, this group of students

belong to the categories of neutral and agree (based on Likert scale) regarding the food management of the university.

4.1 Differences of Perceptions Based on Gender

This analysis is conducted to identify the differences of male and female perceptions towards food management handled by the university during MCO. The process started with normality test towards the data. The significance of Kolmogorov-Smirnov is not normal distribution when the value is lower than 0.05. Table 4 shows the significant values is 0 for both male and female which is lower than 0.05. Thus, the data did not show a normal distribution. Therefore, Mann Whitney test was employed to compare the two independent variables which were male and female.

Table 4: Test of Normality

Kolmogorov-Smirnova	Gender	
	Male	Female
Statistic	0.120	0.084
Degree of Freedom	265	255
Sig.	0.000	0.000

Man Whitney test is one of non-parametric test which compares P-value with predetermined statistical threshold (α), 0.05 [11]. Table 5 shows that the sig. or P-value is higher than 0.05. Therefore, the study reveals that there is no significant difference between the perceptions of male and female students towards the university food management.

Table 5: Mann-Whitney Test Statisticsa

Analysis	Food
Mann-Whitney U	30710.000
Wilcoxon W	65955.000
Z	-1.803
Asymp. Sig. (2-tailed)	0.071

5. Conclusion

Covid-19 crisis happened all of a sudden where the university did not have prior experience in handling such situation. Therefore, it is very important to study the perceptions of students regarding the university's management mainly in handling important tasks such as the food aspect. The study revealed that the students were very satisfied with the food distribution procedure carried out by the university and there was no difference between the male and female students' perceptions in this regard. However, the students provided the lowest score for the aspect of balanced diet. Therefore, the university should pay more attention to the menu provided to the students during this phenomenon. The findings of this study will able to contribute to the body of knowledge in term of emergency situation which could help the university to be more prepared in future to provide the best service for students.

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