



The Impacts of COVID-19 Crisis upon the Consumer Behaviours in Mueang Khon Kaen District, Thailand

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ABSTRACT: Coronavirus disease (COVID-19) is widely spread across the world. The COVID-19 lockdown policy has forced dine-in restaurants and cafes to close. Consequently, there is a plunge in the global economy into severe recession due to less economic activities. On the other hand, the demand for online food delivery services has increased during this period. As a result, the changes in consumer behaviours during the COVID-19 crisis are taken into consideration. Are the COVID-19 crisis and the changes in consumer behaviours related? Due to the new model of consumption, our study aims to observe and discern the relationship between COVID-19 crisis and changes in consumer behaviours. Data were collected by a questionnaire asking about participants' general information, the impacts of COVID-19 on other relevant aspects, and the changes in consumer behaviours during the COVID-19 pandemic. Survey samples, including the population in Mueang Khon Kaen District, Thailand, were randomly selected through a random sampling method with a total of 634 respondents (241 males, 380 females, and 13 others). Our results revealed that the respondents have been highly impacted by the COVID-19 pandemic and their consumer behaviours have been changed significantly compared to the pre-pandemic period. Additionally, statistical analyses showed that there is a significant correlation between the COVID-19 pandemic and the changes in consumer behaviours. This study could serve as a guideline of further studies about the COVID-19 pandemic and consumer behaviours, which can be appropriately adopted in the era for the new normal.

KEYWORDS: COVID-19 crisis, Consumer behaviours, Lockdown policy, New normal, Online food delivery services

INTRODUCTION

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus, which first emerged in Wuhan, China, and reported in late December 2019 as the 2019 novel coronavirus [1]. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes [2]. Tiny infectious particles can linger in the air and accumulate in indoor places, especially where many people gather with poor ventilation [3]. Therefore, mask-wearing, hand hygiene, and physical distance are necessary to prevent the spread of COVID-19 [4]. However, in certain areas with a higher risk of COVID-19, the enforced COVID-19 lockdown by the government has been implemented. The main purpose of the restriction is to minimise the number of new cases to a controllable level [5]. As a result, there are several aspects to be considered about its impacts. The COVID-19 lockdown is a policy that encompasses stay-at-home orders, curfews, quarantines, cordons sanitaires, and similar societal restrictions. Even though the implemented lockdown has contained the spread of COVID-19 [6], another study [7] found that there is a plunge in the global economy into severe recession due to less economic activities, such as agricultural commodities drop. So, dine-in restaurants and cafes have been forced to close [7]. On the other hand, demand for food delivery through online platforms, such as Uber Eats and Foodpanda, has risen dramatically during the COVID-19 crisis [8]. This indicates that such a policy does not have bad consequences only for the economy; most people in the society are also affected, which has led to dramatic changes in how consumers behave.

Moreover, the pandemic has accelerated the shift to e-commerce across regions. For example, one study [9] reports that e-commerce had increased significantly during the first quarter of 2020 in Asian-Pacific countries. Additionally, another study [10] found that there is a shift to online food shopping which sales were highly responsive to online content. However, the relationship between the COVID-19 pandemic which was first emerged in late December 2019 and the changes in consumer behaviours was not expressed



in the above-mentioned studies. Do the COVID-19 crisis have the correlation with the changes in consumer behaviours? The hypothesis of our research is that “the COVID-19 lockdown policy may correlate with how consumers behave.” The main goal of this study is to observe and discern the relationship between COVID-19 crisis and changes in consumer behaviours. Specifically, this study focuses on the changes in food consumption during the COVID-19 pandemic.

METHODOLOGY

A cross-sectional survey was conducted in a sample of the general population in Mueang Khon Kaen District, Thailand. To assess the relationship between the COVID-19 pandemic and the changes in consumer behaviours in Mueang Khon Kaen District, Thailand, we designed the questionnaire consisted of 27 questions. An online survey was delivered to the population in Mueang Khon Kaen District. There were 3 sections in total in the questionnaire: (1) general information of the respondents, (2) the impacts of COVID-19 on other relevant aspects, and (3) the changes in consumer behaviours during the COVID-19 pandemic. In terms of sampling procedure, participants were from Mueang Khon Kaen District, Thailand. Sampling included residents in Mueang Khon Kaen District which were divided into 4 different age groups: (1) 0-18 years old, (2) 19-30 years old, (3) 31-60 years old, and (4) more than 60 years old. There were approximately 5 minutes for the respondents to fill in the survey and 634 respondents were collected for data analysis. The questionnaire contained a 5-point Likert scale. Each statement was on a scale of 1 to 5 ranking from strongly disagree to strongly agree. The response was to express to what extent they agree or disagree with a particular statement. Subsequently, the Index of Item-Objective Congruence (IOC) was used to evaluate each question in the questionnaire by three specialists so as to find the content validity. The items that had scores lower than 0.5 were revised. On the other hand, the items that had scores higher than or equal to 0.5 were reserved. The quantitative data were analysed by Statistical Product and Service Solutions version 26.0 (SPSS). Next, the internal reliability value (Cronbach's Alpha) from the Pilot study group (consisting of 30 residents in Mueang Khon Kaen District) was calculated to ensure whether the survey results were reliable, and the reliability score was 0.836 which was widely acceptable [11]. Lastly, the Pearson's correlation coefficients were calculated to measure how strong a relationship is between the two variables, the COVID-19 pandemic and the changes in consumer behaviours.

INSTRUMENTS

Socioeconomic status

1. Please select your gender.
2. Which of the following age groups do you belong to?
3. What is your current occupation?
4. Which of the following categories best describes your monthly income?
5. What is the highest degree or level of school you have completed?
6. What is your marital status?
7. Do you currently suffer from any chronic diseases?
8. Have you ever received a COVID-19 vaccine?

The impacts of COVID-19 on other relevant aspects

1. The ability to earn money has been negatively impacted by the COVID-19 pandemic.
2. There has been a reduction in the level of salary due to the COVID-19 pandemic.
3. You would spend more money now if you were confident that the economy was headed in the right direction.
4. You are not likely to receive support from the government or other organizations.
5. The operations of your occupation have been stopped or postponed due to the COVID-19 crisis.
6. Teleworking or online learning has been involved in the field of your occupation because of the coronavirus pandemic.
7. Your health or your friend's health has been negatively impacted by a coronavirus.
8. Overall, you have strictly followed the advice provided by your local health authority for preventing the spread of COVID-19: wearing a mask, cleaning your hands often, etc.
9. The disadvantages of COVID-19 lockdown outweigh its advantages.
10. The coronavirus pandemic has interfered with many aspects of your life.



Changes in consumer behaviours during the COVID-19 pandemic

1. You have used food delivery services since the pandemic of COVID-19 began to spread more often than the prepandemic period.
2. Before the pandemic of COVID-19 began to spread, you had gone to the restaurant more often than the postpandemic period.
3. You are more mindful of the food that you are buying since the pandemic of COVID-19 began to spread.
4. The local restaurants which you usually visit have improved their sanitation.
5. You have changed the number of daily meals since the pandemic of COVID-19 began to spread.
6. Your consumption habit has changed since the pandemic of COVID-19 began to spread.
7. Your sense of hunger and satiety has changed during the period at home for the COVID-19 emergency.
8. You have stocked up on food and consumer products amid the coronavirus crisis.
9. Given the economic downturn and your personal finance, you have to be careful with your financial management.

RESULTS AND DISCUSSION

Table 1. General information of participants. (N = 634)

Personal information	Number of participants	Valid Percentage
Gender		
Male	241	38.0
Female	380	59.9
Others	13	2.1
Total	634	100.0
Age Groups		
0-18 years old	167	26.3
19-30 years old	92	14.6
31-60 years old	335	52.8
More than 60 years old	40	6.3
Total	634	100.0
Average Monthly Income		
Less than 15,000 THB	266	42.0
15,001-30,000 THB	115	18.1
30,001-45,000 THB	116	18.3
More than 45,000 THB	137	21.6
Total	634	100.0
Chronic Disease		
Yes, I have.	178	28.1
No, I do not have.	456	71.9
Total	634	100.0

According to Table 1, the majority of participants was female, consisting of 380 people (59.9%). Most of the respondents were at the age of 31-60 years old, consisting of 335 people (52.8%). Most people who answered the questionnaires had an average income of about less than THB 15,000 per month, consisting of 266 people (42.0%). Generally, consumers with different average monthly income are classified with different types of consumer behaviours. To be more specific, in Latvia, consumers who belonged to the social group of lower class were classified with the traditional type, whereas the majority of the upper class were active consumers



[12]. Therefore, average income has been supported as the definitive factor of consumer behaviours. Moreover, the COVID-19 crisis may have little impact on consumer behaviours of the upper class due to less financial hardship when compared to those in the lower class. In terms of chronic diseases, Jason T. Newsom and the group supported that the patterns of consumer behaviours of the U.S. residents aged 50-85 years changed following a new chronic condition diagnosis. For example, there were changes in alcohol consumption, with significant declines in excessive drinking and increases in abstention for a few health condition [13]. However, consumers who have chronic diseases may have not changed their behaviours of consumption due to strict nutritional management which they need to follow. Additionally, 456 respondents do not have chronic diseases (71.9%).

Table 2. Descriptive statistics (Mean and Standard Deviation)

Variable	Mean	Std. Deviation	N
The impacts of COVID-19 on other relevant aspects	3.83	0.67	634
Changes in consumer behaviours during the COVID-19 pandemic	3.88	0.67	634

Table 2 showed the mean and standard deviation of each variable. The mean of the impacts of COVID-19 on other relevant aspects was 3.83. For changes in consumer behaviours, the mean was 3.88. Our results revealed that the impacts of COVID19 on other relevant aspects and the changes in consumer behaviours during this period had the mean values higher than the rate of 2.5, which means that the respondents have been highly impacted by the COVID-19 pandemic and their consumer behaviours has been changed significantly. Additionally, both of the standard deviations were rounded down to 0.67. Moreover, their means and standard deviations were calculated from the same group of participants.

Table 3. The correlation between COVID-19 pandemic and changes in consumer behaviours

		The impacts of COVID-19 on other relevant aspects	Changes in consumer behaviours
The impacts of COVID-19 on other relevant aspects	Pearson’s Correlation	1	0.454**
	Sig. (2-tailed)	-	< 0.001
	N	634	634

**p<0.001

According to Table 3, at the significant level of 0.001, Pearson’s correlation test revealed that COVID-19 pandemic and the changes in consumer behaviours positively correlate. Our results are in agreement with the findings in previous studies. According to Aleksandra Sidor [14], anonymous participants in Poland whose ages are greater than or equal to 18 years old have changed their consumption behaviours in a negative way during the COVID-19 lockdown. Sidor summed up that the participants who had been obese were more prone to salty foods leading Body Mass Index (BMI) to increase. Particularly, overweight, and obese tended to increase BMI more easily which was associated with higher adherence to dietary products, especially salty food, meat, dairy, and fast foods. Also, there was an increase in alcohol consumption [14]. We have observed the similar association between the COVID-19 pandemic and the changes in consumer behaviours. Besides, in the United States of America, Numerator Intelligence [15] has revealed that there were impacts of the COVID-19 crisis upon the consumer behaviours during the COVID-19 lockdown. According to Numerator Insights data, roughly 87% of shoppers placed online orders for delivery between March 2020 and December 2020, and 51% placed online orders for in-store or curbside pickup. These services attracted the most first time shoppers in the spring, but have continued to attract first-time and first-time-recently shoppers throughout the pandemic.



CONCLUSION

Our study on the impacts of COVID-19 crisis upon the consumer behaviours was based on the hypothesis that the COVID-19 pandemic is related to how consumers behave. After the questionnaire had been sent out, and the quantitative data were statistically analysed by SPSS, the results showed that there is a correlation between the COVID-19 pandemic and changes in consumer behaviours in Mueang Khon Kaen District, Thailand. The study needs to be conducted further to find whether the impacts of COVID-19 crisis has caused the changes in consumer behaviours. In the future, we could extend our study to find out about how or why the COVID-19 pandemic has impacted the changes in consumer behaviours on a larger scale. We hope that this study will be able to serve as a guideline for further studies about the COVID-19 pandemic and consumer behaviours, which can be appropriately adopted in the era for the new normal.

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