

CHANGES IN FAST-FOOD CONSUMPTION AND MARKETING DURING THE COVID 19 PANDEMIC IN THE KEGALLE DISTRICT, SRI LANKA

L.D.V.S.Gunawardhana^{*}, A.M.M.U.Adikari

Department of Food Science and Technology, Wayamba University of Sri Lanka

INTRODUCTION

Fast foods are foods that take less time to prepare, particularly those offered at a restaurant with prepared components, and provided to the consumer and generally linked to high calories, total fat, sugar, and sodium in packaged form for takeout (Wang et al., 2018). The COVID 19 pandemic is caused by at severe acute respiratory syndrome and continues to have a global impact on all the sectors. The unforeseen COVID 19 epidemic has now spreads globally to pandemic levels worldwide (Hassen et al., 2021). Many countries have been obliged to implement partial or full lockdowns to control disease outbreaks as a result of the pandemic (Mattioli et al., 2020). After realizing the disease's potential to spread over the whole population of Sri Lanka, the authorities took quick steps to prevent it, including implementing curfew and imposing a travel ban on certain countries (Wickramaarachchi et al., 2020). In Sri Lanka, some studies have been performed on general food consumption behaviour during the COVID 19 situation in the Western Province (Udayanga et al., 2021), the behaviour of online food ordering, and the delivering process during the COVID 19 situation (Ayoobkhan, A. L. M., & Haleem, 2020) etc. Limited studies were conducted to determine the effects of COVID 19 on fast food consumption and marketing in Sri Lanka. Therefore, the major objective of this study was to investigate the changes in the consumption of fast food and marketing behaviour during the COVID 19 pandemic in the Kegalle district with the specific objectives being to identify the changes in fast food consumption behaviour and, fast food marketing during the COVID 19 pandemic, and in the practices that fast food marketers used to ensure the safety of their customers, food, and employees.

METHODOLOGY

A descriptive study was conducted using two questionnaires, with one self-administered online questionnaire for consumers and another interview-administered questionnaire for fast food marketers throughout the Kegalle district. The sample sizes for the customers' and sellers' surveys were conveniently selected. The customer -based survey was designed to yield a nationally representative sample of participants aged 12 years and older and it was aimed at 250 participants, out of which 201 responses were received (80.4%) through a self-administered online questionnaire and by personal interviews with participants. More than half of the customer -based surveys were conducted online by sending through e-mail and the rest were by personal interviews. Almost all the seller -based surveys were conducted by personal interviews with printed questionnaires, asking the questions from the participants. Participants filled out a survey that was directly linked to the Google platform. The consumer -based surveys and seller -based both surveys were voluntary and each contained six sections, which was estimated to be completed within 10-15 minutes. Both questionnaires were conducted in the English language and translated to the Sinhala language. For the seller -based survey, 39 (78%) of the 50 participants responded through personal interviews and 9 (18%) responded by an online questionnaire. Data was collected from 8th November to 10th of December, 2021. In the customer -based surveys, the socioeconomic details of the participants, fast food consumption patterns, comparison of fast food consumption behaviour during and before the COVID 19 situation were evaluated, and the determination of the changes in fast food consumption was asked in separate sections. In the seller -based surveys, the comparison of fast food selling behaviour during and before the COVID 19 situation was evaluated, including the information about how shops



adjusted to the unexpected situation of COVID 19 and the changes in the selling conditions of fast food items. Coding and entering of the gathered data was done using Microsoft Excel. Data was represented as frequencies and percentages in parentheses (%) for categorical variables. The Chi square test was employed to assess the association between the socioeconomic variables while Wilcoxon sign rank test analysis was used to investigate the median differences between the two sets of variables of pre and during the COVID 19 emergency. The p< 0.05 was selected as a significant value. Statistical analysis was performed using SPSS version 16 software.

RESULTS AND DISCUSSION

Results revealed that the study was conducted on samples of 201 consumers and 39 fast food outlets. The consumer -based survey consisted of more females than males (53.7% female) and most of the participants were in the 20-29 years age category (45%) while the majority were Sinhalese (78.6%). According to the monthly income, the majority included the middle income category. A majority of consumers (84.6%; 170/201) stated that buns varieties are their favourite fast food item generally, more over three -quarters of the participants (81.1%; 163/201) said they buy quick food from established bakeries and fast food restaurants. According to a prior study (Thornton et al., 2009), socio -demographic and socio -economic characteristics, neighbourhood disadvantage, and attitudes are all variables that have been identified as potential predictors of fast food purchasing by consumers.

Considering the frequency of fast food consumption before the COVID 19 pandemic, more than a quarter of respondents (31.3%; 44/201) said they ate fast food two or three times a week before the pandemic. Consumer of the Daily and Rarely groups (6.5%; 13/201) were equal and reported as minimum value. During the COVID 19 situation, each of the respondent groups reported (22.4%; 45/201) the highest consumption level as being two or three days per week and lowest being one day per week. Daily consumption was the minimum (4%; 8/201). Before the pandemic, 31.3% (63/201) spent Rs.100 - 500 on fast food but during the pandemic it reduced by 22.4% (45/201). Before the pandemic, 7% (14/201) spent less than Rs.100 for fast food but during the pandemic, 29.4% (59/201) responded as having spent less than Rs.100 on fast food weekly. So during the COVID 19 situation, spending on fast food products also shifted.

During the COVID 19 incident, customers who ordered fast food products online slightly increased. More than half the respondents (57.7% (116)) answered that they do not prefer online ordering of fast food items and more than half (54.7% (110)) answered that they do not prefer to purchase fast food items through mobile delivery services. So, fast food consumption has reduced by 59.7% during the pandemic while online ordering and purchasing from mobile deliveries have increased by 14.9% and 35.82%, respectively. According to similar studies, online food shopping has increased dramatically as 45% of people doing online shopping while 10% do not involve. This tendency is most prominent in the 18-35 years age group with 41% reporting an increase compared with 33% in the 36-55 years age group and 24% in the 55+ years age group (Hassen et al., 2021).

Out of the 201 participants, 156 (77.6%) answered that their fast food consumption had changed. From them, 120 (59.7%) answered that it was a reduction due to travel restrictions and lockdown conditions as the major reasons for the reduction while 40 (19.9%) answered that it was an increment due to changes in general food consumption patterns and having the entire family at home as major reasons.

Table 1 represents the comparisons before and during the pandemic period, which revealed a significant decrease between the pre and during pandemic periods for the "Consumption frequency of fast food" (0.000,p<0.05), and "weekly expenditure on fast food" (0.000,p<0.05), while there were significant increases in "Online ordering" (0.000,p< 0.05) and "Purchasing from mobile deliveries" (0.000,p<0.05) by consumers.



Table.1 Comparison of some variables of fast food consumption between the pre and during
pandemic situations to find out if there was any significant change between these periods

Variables	P values
How often do you consume weekly	0.000*
How much do you spend on fast food weekly	0.000*
Preference for purchasing from mobile delivery services	0.000*
Preference for purchasing through online ordering	0.000*

*Significantly at p < 0.05

In our investigation of the relationships between demographic variables with fast food consumption behaviour, there were positive associations between preferences for "Online ordering" during the COVID 19 period with the "Occupation" (0.000,p<0.05) and "Monthly income" (0.009,p<0.05) of the consumers (Table.2).

Table.2 Associations between respondents'	demographic	variables	with	the	effect	of fast	food
consumption behaviour							

Variables	Change of consumption	Preference for Online	Preference for purchasing
	(Reduction / increment	ordering	from mobile delivery
	or no change)		services
Gender	0.326	0.925	0.754
Occupation	0.304	0.000*	0.068
Monthly income	0.224	0.009*	0.346

*Significantly at p < 0.05

Nearly 90% of the fast food marketers claimed that fast food marketing reduced by 89.7% with the continuous lockdowns and health concerns being the main reasons. Prior to the pandemic, nearly half of the outlets answered as having 10-100 daily customers, while nearly 22% of outlets said they had closed. Considering the daily revenue from fast food items, before the pandemic, nearly one third of outlets answered that Rs.20, 000-50, 000 revenue was earned daily, while during the pandemic, 27% of fast food outlets reported that the daily revenue had been less than Rs.2000. Before the pandemic, almost 100% agreed with marketing at the shop but during the pandemic, only 58.3% agreed with this strategy. In order to maintain consistent manufacturing and marketing, 62.2% of outlets had developed new dishes while efficiently providing takeout/deliveries (56.8%). Comparisons (Table.3) revealed that there were significant decreases between pre and during the pandemic for the "Number of daily customers" (0.000,p<0.05) and "Daily revenue" (0.000,p<0.05). Marketing at the shop significantly decreased (0.000,p<0.05) while marketing through online orders significantly increased. (0.01,p<0.05)



Table.3 Comparison of the variables of fast food marketing between the pre and during pandemic situations to investigate if there was any significant change between these situations

Variables	P values				
Amount of daily customers	0.000*				
Daily revenue	0.000*				
Higher income earned method					
Selling at the shop	0.000*				
Selling through online orders	0.01*				
Selling by mobile delivery service	0.187				

*Significantly at p < 0.05

CONCLUSIONS/RECOMMENDATIONS

This study aimed to investigate the changes in the consumption of fast food and marketing behaviour during the COVID 19 pandemic situation in the Kegalle district. Our findings suggest that fast food consumption behaviour has changed due to the COVID 19 pandemic situation by significantly decreasing the frequency of fast food consumption and expenditure on it, while significantly increasing the preference for online ordering and purchasing from mobile deliveries. Moreover, this study found that there were some positive associations between consumers' preferences for online ordering during COVID 19 period with their occupation and monthly income. Fast food marketing behaviour has also changed due to the COVID 19 pandemic. The number of customers and daily revenue significantly decreased while online ordering and delivery services showed some increment. The fast food marketers have taken measures to increase their revenue with consistent manufacturing, following some procedures that were recommended for the safety of customers and food, during the pandemic period.

In future research in this area, there is a need to identify the behaviour related to fast food and other general food consumption, and purchasing during the COVID 19 pandemic situation for the whole population taking into account the with various demographic, soico -economic, and educational backgrounds. There is a further need to identify the fast food marketing behavioural changes for the whole population during the COVID 19 pandemic through categories of urban, semi-urban, and rural population.

REFERENCES

Ayoobkhan, A. L. M., & Haleem, A. (2020). Online Food Ordering and Delivery Application During Covid 19 in Sri Lanka. *Journal of Information Systems & Information Technology* (*JISIT*), 5(1), 8. https://www.seu.ac.lk/jisit/publication/v5n1/JISIT-5125.pdf.

Hassen, T. B., El Bilali, H., Allahyari, M. S., Berjan, S., & Fotina, O. (2021). Food purchase and eating behavior during the COVID-19 pandemic: A cross-sectional survey of Russian adults. *Appetite*, *165*, 105309. <u>https://doi.org/https://doi.org/10.1016/j.appet.2021.105309</u>.

Mattioli, A. V, Sciomer, S., Cocchi, C., Maffei, S., & Gallina, S. (2020). Quarantine during COVID-19 outbreak: Changes in diet and physical activity increase the risk of cardiovascular disease. *Nutrition, Metabolism and Cardiovascular Diseases, 30*(9), 1409–1417. https://doi.org/https://doi.org/10.1016/j.numecd.2020.05.020.

Thornton, L. E., Bentley, R. J., & Kavanagh, A. M. (2009). Fast-food purchasing and access to fast-food restaurants: a multilevel analysis of VicLANES. *International Journal of Behavioral*



Nutrition and Physical Activity, 6(1), 28. <u>https://doi.org/10.1186/1479-5868-6-28</u>.

Udayanga, T., Dhanukshaan, S., & Murugadas, K. (2021). Consumer Behaviour During A Crisi: The Impact Of Covid-19 On Food Consumptian Patterns In The Urban Areas In The Western Provice Of Sri Langka. *International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal*, 7(2), 254–262. <u>https://doi.org/10.36713/epra2013</u>.

Wang, C. S., Wang, J., Zhang, X., Zhang, L., Zhang, H. P., Wang, L., Wood, L. G., & Wang, G. (2018). Is the consumption of fast-foods associated with asthma or other allergic diseases? *Respirology*, 23(10), 901–913. <u>https://doi.org/https://doi.org/10.1111/resp.13339</u>.

Wickramaarachchi, W. P. T. M., Perera, S. S. N., & Jayasinghe, S. (2020). COVID-19 Epidemic in Sri Lanka: A Mathematical and Computational Modelling Approach to Control. *Computational and Mathematical Methods in Medicine*, 2020, 4045064. <u>https://doi.org/10.1155/2020/4045064</u>.