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## The Impact of Total Lockdown on Malaysians: A Cross-Sectional Study

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### Abstract

Malaysia has conducted a series of total lockdowns that involved movement restrictions and temporary closure of non-essential industries to curb the spread of the virus. Malaysians have created some degree of normalcy while living with the pandemic. Therefore, this study aimed to identify the most trusted COVID-19 source of information among Malaysians. It will also identify the newly cultivated habits, personal experiences, and the most affected groups during the implementation of the total lockdowns in Malaysia. Data were obtained via an online survey which was administered to 279 willing participants throughout Malaysia. Descriptive analysis was used to investigate the impact of the lockdown on individual stress levels, while Mann-Whitney U and Kruskal-Wallis tests were used to determine whether there were any significant differences in the impact of the lockdown among the respondents involved. The study found physical distance, self-quarantining, and religiously following media coverage have become routine among Malaysians. The study also identified singles, young people, part-time workers, and unemployed people as the most affected groups in terms of income, family conflict, and access to food and mental health treatments. Total lockdowns had the greatest impact on the daily routine of Indians and indigenous ethnic groups of Borneo compared to other groups of people. This study offers some important insights into the effects of total lockdown on different groups of Malaysians. It can also provide critical information to policymakers, government agencies, and researchers in the event of an additional lockdown or a pandemic.

**Keywords:** Total Lockdown, COVID-19, Malaysia.

### Introduction

There are 612.2 million confirmed COVID-19 cases including 6.5 million deaths reported globally by September 2022 (WHO, 2022). As of the confirmed COVID-19 cases in Malaysia, 4.8 million were reported with 36,350 deaths (Ministry of Health Malaysia, 2022). The World Health Organization has identified Public Health and Social Measures (PHSM) to help prevent the spread of COVID-19 (WHO, 2021). PHSM consists of six (6) measures which include facial covering or mask-wearing, restriction on public or private gatherings, restriction of domestic movement, restriction of international traveling, and adaptation or closure of businesses and schools (WHO, 2021).

The Southeast Asian countries implemented more regulated and aggressive approaches to mitigate the spread of COVID-19 which increased the degree of compulsion towards law among their citizens (Mehta, 2021). To combat the spread of the virus and false information, strict rules such as physical separation, campaigns, and penalties were implemented (Mehta, 2021; Mumin, 2020). Another global strategy that has been implemented is the lockdown of cities, regions, or entire nations. However, a total lockdown changes the psychosocial environment (Fegert et al., 2020; Holmes et al., 2020) and individual psychological well-being (Pierce et al., 2020). Those who shared confined physical spaces experienced increased tensions, perceived isolation, and a lack of social connection as a result of the lockdown (Smith et al., 2020). Younger individuals, females, with low income and children in the household are more susceptible to psychological distress due to the lockdown (Shevlin et al., 2020). Total lockdown also disrupts daily routine and interaction due to the closure of all sectors except essential services (Mumin, 2020). It also has a significant impact on individual sleep patterns and overall livelihood (Florea et al., 2021).

Movement control orders and total lockdowns in Malaysia involve the closure of all government agencies, private sectors, and education institutions except essential services (Mumin, 2020). Malaysians were not allowed to leave their home and will be liable to a fine or imprisonment not exceeding six months if fail to comply with the Prevention and Control of Infectious Disease Act 1988 (Malaysian National Security Council, 2020). Many individuals were forced to work from home and some lost their source of income due to the total lockdowns imposed by the government of Malaysia. Therefore, this study intends to identify Malaysians' most trusted COVID-19 source of information. It will also identify the new cultivated habits, personal experiences, and the most affected group due to the implementation of a series of total lockdowns in Malaysia.

### **Literature Review**

#### **Total lockdown in Malaysia**

COVID-19 was first detected in December 2019 in Wuhan, China, and infected 612.2 million worldwide (WHO, 2022). As of September 2022, 4.8 million were infected in Malaysia and 36,350 individuals succumbed to the virus (WHO, 2022). Several strategies were implemented to mitigate the spread of COVID-19 worldwide. At the early stage of the pandemic, the World Health Organization (WHO) suggests precautionary actions such as avoiding crowded places, wearing masks, washing hands, and physical distancing to curb the spread of COVID-19. Movement control order was implemented worldwide and some countries such as China, New Zealand, and Malaysia opt for a total lockdown (Mumin, 2020). The total lockdown lasted from several weeks to months depending on the number of cases in the countries.

The government of Malaysia utilizes a variety of approaches from various perspectives to manage the impact of the pandemic on the healthcare system and society. The approaches include movement control, contact tracing, a national vaccination program, and financial assistance for affected individuals and businesses (Malaysian National Security Council, 2020). Malaysia implemented a series of total lockdowns between March 2020 to June 2021. The most recent total lockdown in Malaysia was imposed on 1st June 2021 when the confirmed cases reached 7,105. The total lockdown was to be extended indefinitely until the daily cases fell below 4,000 (Reuters, 2021). The Malaysian government offers assistance to selected

household categories and small-medium enterprises in an effort to reduce the impact of the pandemic (Shah et al., 2020).

Malaysians cultivated new habits to create some degree of normalcy while living with the pandemic. Living in an isolation is expected and may lead to psychosocial issues in society. Keeping updated with the latest information from various mediums to protect oneself and one family from COVID-19 is part of the daily routine. The world began to show signs of pandemic fatigue after two years of living in isolation with various restrictions (World Health Organization, 2020). COVID-19 disrupts livelihood due to the movement restriction, as well as the closure of businesses, industry, government, and education institutions (Graham and Ozbilgin, 2021). Consequently, the pandemic redefined priorities in an individual's personal and professional life.

#### *New Cultivated Habits due to the Pandemic*

The government worldwide responds to the pandemic with pharmaceutical and non-pharmaceutical interventions (NPI) policies. Contact tracing, national testing, quarantine, and vaccination programs are among the pharmaceutical intervention policies (Arnon et al., 2020). While NPI policies aim to mitigate the transmission of the virus and reduce the mortality rate through behavioral changes by distancing physical proximity, shelter-in-place, and the closure of schools and non-essential businesses (Arnon et al., 2020). The non-pharmaceutical intervention policies have a significant impact on individual livelihood and mental well-being. Most employees worked from home during the total lockdown, while others had to stop working (Shah et al., 2020). The combination of the temporary removal of children from school and work from home create additional conflict between work and personal domains (Mumin, 2020).

Malaysians' behavior changes significantly as a result of the imposed national intervention policies. After two years of the pandemic, physical separation, wearing a protective mask, and frequent hand sanitizing became the norm. It was reported that Malaysians prefer to stay at home, avoid crowded places and traveling, as well as public transportation due to fear of contracting the virus (Shah et al., 2020). Stringent preventive policies may also trigger negative behavioral responses such as the adoption of risky behavior, limitation in access to healthcare services, and loss of trust in the healthcare system (Chi et al., 2020). Individual values, cultural dimensions, government enforcement, and the quality of the healthcare system all influence behavioral responses to pandemic-prevention strategies.

#### *The Impact of a total lockdown on Malaysians*

Studies on the pandemic's financial, social, and psychological well-being have gained momentum. Previous research has extensively highlighted issues such as mental health, interpersonal relationships, parenting stress, job loss, and substance abuse (O'Donnell et al., 2021). The movement restrictions, temporary closure of services, and non-essential industries during lockdown are detrimental to business, and individual livelihoods. Individuals and businesses affected may experience a loss of earnings and immediate cash flow constraints (Cheng, 2020). Younger employees who mostly work in the service sector face a direct impact of the lockdown contributed to the rise of job separation rates (Graham and Ozbilgin, 2021). Because of the lockdown, more low-income households lost their source of income and struggled to provide for family members. For example, activists in Malaysia launched the

White Flag movement to assist affected households (Radhi, 2021). The movement encourages those in need of food, necessities, or medical assistance to raise a white flag to alert neighbors and receive assistance. Total lockdown and intensified government policies lead to extreme stress and drastic alteration of individual social life (Anderson et al., 2020)

An increased level of stress, anxiety, and depression were widely reported psychological reactions during the pandemic (Atalan, 2020; Indu et al., 2021). A systematic review conducted during the first wave of the pandemic found depression and anxiety rates ranging from 14.6 to 48.3 percent and 6.33 to 50.9 percent, respectively (Marzo et al., 2021). The study also reported an increase in the level of depression and anxiety in the third wave of the pandemic. The symptoms were severe among women compared to men (Marzo et al., 2021). Depression and anxiety were also found to be more prevalent in single people compared to married and divorced people (Marzo et al., 2021).

A study on the first lockdown in the Northern Netherlands data discovered that depression symptoms are more prevalent in women, while men experience more anxiety (Vloo et al., 2021). Women are responsible for the majority of household duties and are primary caregivers for their children and the elderly (Ferrant et al., 2014). Women spend three to six hours per day on household responsibilities, which have increased significantly since the outbreak of the pandemic (O'Donnell et al., 2021). Any additional care responsibilities resulting from the pandemic where the healthcare system was stretched are also delegated to women (Nanthini and Nair, 2020). During the current measures of curfew, lockdown, and quarantine, family violence calls reported an increase of 137 percent in Singapore (AWARE, 2020).

In the United Kingdom, self-isolation and social distancing measures cause a high level of anxiety and depression among community members (Smith et al., 2020). Consistent findings on the increased level of anxiety and loneliness were reported among community-based adults in the United States of America due to stay-at-home orders (Tull et al., 2020). A higher level of anxiety, depression, and post-traumatic disorder (PTSD) symptoms were found among younger individuals, families with children, and those with pre-existing health conditions in the United Kingdom (Shevline et al., 2020). It was also reported that individuals tend to go to bed earlier and wake up later during the lockdown in all 5 countries (Austria/Germany, Ukraine, Greece, Cuba, and Brazil) with no cross-cultural effects (Florea et al., 2021). Sleep quality worsens when people are worried about the pandemic, they shift their bedtimes or sleep more on workdays (Florea et al., 2021).

## **Research Methodology**

### *Data Collection*

Data was collected using an online questionnaire. Respondents can choose whether they want to complete the questionnaire in Malay or English. The instruments were pilot-tested for feasibility and applicability before the final version was sent out. The survey collects information about respondents' demographics, their trusted COVID-19 source of information, their stress level (both general and pandemic-related), and the impact of the lockdown on their lives. Data were collected during the second phase of the nationwide lockdown in Malaysia. The first phase took effect during the first two weeks of June 2021. It was followed by the second phase, which lasted four weeks more. A convenient sampling method was used, with 279 willing participants. All responses were kept anonymous and confidential.



### *Measures.*

The questionnaire consists of six sections. Section 1 collects information such as the type of MCO, age, gender, ethnicity, and status of employment using self-developed items. The second section includes a list of COVID-19 information sources. Respondents were required to choose all of their reliable sources of information. The item was developed by the National Institute of Environmental Health Science USA. The third and fourth sections of the survey assessed general and pandemic-related stress, respectively. The general stress was measured using 10 items from the Perceived Level of Stress Scale by Cohen, Kamarck, and Mermestein (1983). The Pandemic Stress Index by Harkness (2020) was used to assess pandemic-related stress. The final section examined the impact of the MCO using Coronavirus Impact Scale by (Stoddard and Kauffman, 2020). Respondents are asked to rate how much the pandemic has changed their lives in nine daily routines.

### *Data Analysis*

The most trusted source of COVID-19 information, new cultivated habits, and personal experience during the lockdown were identified using frequency and percentage. Descriptive analysis was employed to examine the impact of lockdown on individual stress levels and life in general. Due to the different sample sizes and variations between groups, Mann-Whitney U and Kruskal-Wallis tests were used to examine any significant differences in the impact of lockdown among respondents involved. Mann-Whitney U test was used to test the impact of lockdown among individuals who are in a different type of MCO, gender, and marital status while Kruskal-Wallis test was used for groups of different ages, ethnicity, and employment status. The smallest group is assigned a rank of one, while the largest number is assigned a rank of N. If the p-value is small, the researcher can reject the idea that the difference is due to random sampling and conclude that the populations have different distributions (Jonker and Pennink, 2010). If the p-value is large, the data do not give any reason to conclude that the distributions differ (Jonker and Pennink, 2010).

### **Findings**

#### Respondents' backgrounds

Table 1 summarizes information on the gender, marital status, age, ethnicity, and type of employment of the 279 respondents involved. The majority of the respondents, which constituted 76.7 percent, were under the movement control order (MCO). They are predominantly female which represents 73.5 percent of the respondents. Out of the 279 respondents, 228 are single and are mostly age 22 to 30 years old (68.5 percent). It was reported that 93 of the respondents are of the indigenous ethnic of Borneo, followed by Malay, 73; Chinese, 54; and Indians, 49. The majority of the respondents are not working, while only 60 are fully employed and 7 work as a part-timer.

Table 1

*Distribution of Respondents*

		Frequency	Percentage (%)
Type of movement control order	MCO	214	76.7
	EMCO	65	23.3
Gender	Male	74	26.5
	Female	205	73.5
Marital status	Single	228	81.7
	Married	51	18.3
Age	21 years old or less	25	9.0
	22 to 30 years old	191	68.5
	31 to 40 years old	41	14.7
	41 to 50 years old	16	5.7
	More than 50 years old	6	2.2
Ethnicity	Malay	73	26.2
	Chinese	54	19.4
	Indians	49	17.6
	Ethnic of Borneo	93	33.3
	Others	10	3.6
Employment status	Full-time	60	21.5
	Part-time	7	2.5
	Not working	212	76.0

Trusted sources of COVID-19 information.

Referring to Table 2, 73.5 percent of the respondents obtained their COVID-19-related information from television followed by government agencies (71.3 percent). The news portal was also the main source of information among 180 respondents for an update on the pandemic. Non-government organizations and friends were the least trusted sources of information, accounting for 4.2 percent and 5.6 percent of total responses, respectively.

Table 2

*Trusted Sources of COVID-19 Information*

COVID-19-related source of information.	source	Responses		Percent of Cases
		N	Percent	
COVID-19-related source of information.	Physician	145	10.6%	52.0%
	Pharmacist	123	9.0%	44.1%
	Family members	115	8.4%	41.2%
	Friends	77	5.6%	27.6%
	Television	205	15.0%	73.5%
	News Portal	180	13.2%	64.5%
	Radio	139	10.2%	49.8%
	Social Media	127	9.3%	45.5%
	NGO	58	4.2%	20.8%
	Government agencies	199	14.5%	71.3%
Total		1368	100.0%	490.3%

New cultivated habits during the total lockdown.

Table 3 presents a list of new habits cultivated due to the total lockdown. Sixty-four (64) respondents which represent 6 percent of the total responses have reported no changes to their life or behavior during the implementation of the total lockdown. It represents 22.9 percent of the total respondents. However, the majority have cultivated new habits to cope with the increasing number of positive COVID-19 cases in Malaysia. The changes cover the working arrangements, social affairs, and leisure activities. Physical distancing is practiced by 75.3 percent of respondents as part of their effort to combat the spread of COVID-19. Out of 279 respondents, 74.9 percent began religiously following media coverage of the pandemic, while 51.6 percent practice self-quarantining.

Table 3

*Cultivated Habits During the Pandemic*

	Responses		Percent of Cases
	N	Percent	
No changes to my life or behavior.	64	6.0%	22.9%
Practicing physical distancing	210	19.8%	75.3%
Isolating or self-quarantining	144	13.6%	51.6%
Caring for someone at home	109	10.3%	39.1%
Working from home	78	7.4%	28.0%
Not working	68	6.4%	24.4%
A change in the use of healthcare services	82	7.7%	29.4%
Following media coverage related to COVID-19	208	19.6%	74.6%
Changing travel plans	97	9.2%	34.8%

Personal experience during the total lockdown.

Table 4 shows the personal experience among respondents during the implementation of the total lockdown. Five percent of the respondents have tested positive for COVID-19. However, the main concern during the total lockdown is the safety of family members and friends. Two hundred forty-three (243) respondents worry about the well-being of friends and family compared to themselves. Only 212 respondents which represent 76 percent of the total respondents worry about being infected with COVID-19. One hundred seventy-two (172) respondents experience boredom and frustration while 61.3 percent have changed their sleeping patterns during the total lockdown. Of the total respondents, 57.7 percent reported fear of infecting someone else with COVID-19 while 40.5 percent experienced anxiety and depression due to the movement control order. By preventing oneself and others from getting infected by COVID-19, 38.7 percent reported feeling that they contributed to a greater good. On the other hand, less than 3 percent of the respondents reported an increase in alcohol or substance consumption (0.6%), discrimination (2.0%), or confusion about what COVID-19 is (2.4 percent).



Table 4

*Personal Experience During the Movement Control Order 3.0.*

	Responses		Percent Cases	of
	N	Percent		
Being diagnosed with COVID-19	14	0.8%	5.0%	
Fear of being infected with COVID-19	212	12.7%	76.0%	
Fear of infecting someone else with COVID-19	161	9.7%	57.7%	
Worrying about friends, family, etc.	243	14.6%	87.1%	
Discrimination from other people	34	2.0%	12.2%	
Personal financial loss	89	5.3%	31.9%	
Frustration or boredom	172	10.3%	61.6%	
Not having enough basic supplies	49	2.9%	17.6%	
Anxiety and depression	113	6.8%	40.5%	
Changes to your normal sleep pattern	171	10.3%	61.3%	
Increased alcohol or other substance use	10	0.6%	3.6%	
Loneliness	93	5.6%	33.3%	
Confusion about what COVID-19	40	2.4%	14.3%	
Feeling that I was contributing to the greater good by preventing myself or others from getting COVID-19	108	6.5%	38.7%	
Getting emotional or social support from family, friends, a counselor, or someone else	95	5.7%	34.1%	
Getting financial support from family, friends, an organization, or someone else	63	3.8%	22.6%	
Total	1667	100.0%	597.5%	

The impact of the total lockdown.

During the total lockdown, respondents reported experiencing occasional stress ( $M=3.2964$ ). Based on table 6, the total lockdown has a moderate impact on the respondents in this study. There have been no changes in terms of access to mental health treatment and personal COVID-19 diagnosis. However, mild changes in medical healthcare access. Respondents have slight changes in access to extended family and non-family social supports which is in line with a mild level of pandemic stress-related and family conflict. The total lockdown has a minor impact on family income, employment, and individual food access. The following tables will discuss the detailed effects of total lockdown on various groups of people.

Table 5

*Mean value, standard error, and standard deviation for the perceived level of stress.*

	Mean	Std. Error	Std. Deviation
Perceived level of stress	3.2964	.02989	.49927

Table 6

*Mean values, Standard Errors, and Standard Deviations for the coronavirus impact scale.*

	Mean		Std.
	Statistic	Std. Error	Deviation Statistic
Daily routine.	2.97	.049	.820
Family income and employment.	2.19	.048	.795
Food access.	1.77	.047	.785
Medical health care access.	1.63	.050	.842
Mental health treatment access.	1.40	.046	.775
Access to extended family and non-family social supports.	2.01	.051	.854
Experiences of stress related to the coronavirus pandemic.	2.30	.053	.890
Stress and family conflict.	1.73	.049	.817
Personal diagnosis of coronavirus.	1.17	.025	.412

The most impacted group during the total lockdown

Mann-Whitney U test was used to analyze the different impacts of the total lockdown depending on the types of a movement control order, gender, and marital status. The results reveal a statistical difference in the impact of total lockdown for family income ( $Z = -4.419$ ,  $p < 0.001$ ), food access ( $Z = -2.803$ ,  $p < 0.005$ ), pandemic-related stress ( $Z = -2.525$ ,  $p < 0.012$ ), and family conflict ( $Z = -2.249$ ,  $p < 0.025$ ). Individuals of different marital statuses have been most affected by the total lockdown in terms of family conflict, followed by pandemic-related stress, food access, and family income. Single people were more affected than married people, with mean rankings of 149.46, 145.93, 145.45, and 144.17 for family income, food access, pandemic-related stress, and family conflict, respectively.

Table 7

*Mann-Whitney U Test Results Comparing the Mean Rank of the Total Lockdown Impact variable among Type of Movement Control Order, Gender, and Marital Status Groups.*

Variable	Subgroup	N	Mean Rank	Z	Asymp. Sig. ( $p$ )
Daily routine	Type of movement control order			-0.674	0.500
	EMCO	65	134.55		
	MCO	214	141.65		
	Gender			1.091	0.275
	Male	74	131.91		
	Female	205	142.92		
Family income/employment	Marital status			-0.597	0.551
	Single	228	141.26		
	Married	51	134.38		
Family income/employment	Type of movement control order			-1.455	0.146
	EMCO	65	128.05		
	MCO	214	143.63		

	Gender			-0.592	0.554
	Male	74	144.46		
	Female	205	138.39		
	Marital status			-4.419	0.001
	Single	228	149.46		
	Married	51	97.71		
Food access.	Type of movement control order			1.080	0.280
	EMCO	65	148.77		
	MCO	214	137.34		
	Gender			-0.868	0.385
	Male	74	146.47		
	Female	205	137.67		
	Marital status			-2.803	0.005
	Single	228	145.93		
	Married	51	113.48		
Medical health care access.	Type of movement control order			-0.176	0.860
	EMCO	65	138.64		
	MCO	214	140.41		
	Gender			-0.123	0.902
	Male	74	140.87		
	Female	205	139.69		
	Marital status			-1.098	0.272
	Single	228	142.21		
	Married	51	130.11		
Mental health treatment access.	Type of movement control order			-0.082	0.934
	EMCO	65	139.45		
	MCO	214	140.17		
	Gender			0.125	0.901
	Male	74	139.24		
	Female	205	140.27		
	Marital status			-0.814	0.415
	Single	228	141.41		
	Married	51	133.72		
Access to extended family and non-family social support.	Type of movement control order			0.064	0.949
	EMCO	65	140.52		
	MCO	214	139.84		
	Gender			0.165	0.869
	Male	74	138.76		
	Female	205	140.45		
	Marital status			-1.580	0.114
	Single	228	143.39		
	Married	51	124.85		

Experiences of stress related to the pandemic.	Type of movement control order		-0.619	0.536
	EMCO	65	134.85	
	MCO	214	141.56	
	Gender		1.702	0.089
	Male	74	127.02	
	Female	205	144.69	
	Marital status		-2.525	0.012
	Single	228	145.47	
	Married	51	115.53	
Stress and family conflict.	Type of movement control order		-1.500	0.134
	EMCO	65	127.34	
	MCO	214	143.14	
	Gender		0.574	0.566
	Male	74	135.27	
	Female	205	141.03	
	Marital status		-2.249	0.025
	Single	228	144.17	
	Married	51	118.20	
Personal diagnosis of coronavirus.	Type of movement control order		-0.063	0.950
	EMCO	65	139.65	
	MCO	214	140.11	
	Gender		0.153	0.878
	Male	74	139.23	
	Female	205	140.28	
	Marital status		-1.188	0.235
	Single	228	141.70	
	Married	51	132.40	

\*EMCO (Enhanced Movement Control order), MCO (Movement Control Order)

Table 8 indicates a significant impact of the total lockdown on family income, food access, and pandemic-related stress among those from five different groups of age (21 years old or less, 21 to 30 years old, 31 to 40 years old, 41 to 50 years old, and 51 years old or more) at  $p < 0.05$ . The chi-square value  $\chi^2$  for the family income (39.137) was the highest, followed by pandemic-related stress (18.409), and access to food (15.966). The observed significance level for daily routine ( $p = 0.798$ ), medical health care access ( $p = 0.712$ ), mental health care treatment ( $p = 0.580$ ), social support from extended family or non-family members ( $p = 0.220$ ), family conflict ( $p = 0.062$ ), and personal diagnosis of coronavirus ( $p = 0.590$ ) is higher than 0.05 which implies no variation between the five groups in the population.

Column 4 of Table 8 shows which age groups were the most and least affected by the total lockdown in terms of family income, food access, and pandemic-related stress. Individuals aged 22 to 30 were the most affected group in terms of access to sufficient and high-quality foods, with a mean rank of 151.34. With a mean rank of 148.32, they are also the most affected group in terms of pandemic-related stress. As for family income, individuals aged 21

years old or less are the most impacted group. Those in the age group of 50 years or older are the least impacted group when it comes to family income and access to food. Individuals between the age of 41 to 50 years old are the least impacted by pandemic-related stress.

Table 8

*K-W test results comparing the mean ranks of the total lockdown impact variable amongst age groups.*

Variable	Subgroup	N	Mean Rank	$\chi^2$	Asymp. Sig. ( $\rho$ )
K-W Test:					
Daily routine	21 years old or less	25	137.08	$\chi^2=1.660$	0.798
	22 to 30 years old	191	140.54		
	31 to 40 years old	41	148.05		
	41 to 50 years old	16	126.06		
	More than 50 years old	6	117.08		
Family income/employment	21 years old or less	25	166.70	$\chi^2=39.137$	0.001
	22 to 30 years old	191	153.23		
	31 to 40 years old	41	98.48		
	41 to 50 years old	16	75.88		
	More than 50 years old	6	62.50		
Food access.	21 years old or less	25	107.70	$\chi^2=15.966$	0.003
	22 to 30 years old	191	151.34		
	31 to 40 years old	41	127.30		
	41 to 50 years old	16	103.25		
	More than 50 years old	6	98.50		
Medical health care access.	21 years old or less	25	124.98	$\chi^2=2.131$	0.712
	22 to 30 years old	191	143.85		
	31 to 40 years old	41	135.50		
	41 to 50 years old	16	133.13		
	More than 50 years old	6	129.00		
Mental health treatment access.	21 years old or less	25	138.02	$\chi^2=2.68$	0.580
	22 to 30 years old	191	143.46		
	31 to 40 years old	41	134.62		
	41 to 50 years old	16	120.81		
	More than 50 years old	6	125.92		
Access to extended family and non-family social supports.	21 years old or less	25	126.82	$\chi^2=5.730$	0.220
	22 to 30 years old	191	145.36		
	31 to 40 years old	41	139.46		
	41 to 50 years old	16	115.84		
	More than 50 years old	6	92.25		
Experiences of stress related to the pandemic.	21 years old or less	25	121.68	$\chi^2=18.409$	0.001
	22 to 30 years old	191	148.32		
	31 to 40 years old	41	145.71		
	41 to 50 years old	16	75.94		
	More than 50 years old	6	83.33		

Stress and family conflict.	21 years old or less	25	153.76	$\chi^2=8.952$	0.062
	22 to 30 years old	191	144.92		
	31 to 40 years old	41	124.90		
	41 to 50 years old	16	102.09		
	More than 50 years old	6	104.50		
Personal diagnosis of coronavirus.	21 years old or less	25	146.00	$\chi^2=2.808$	0.590
	22 to 30 years old	191	141.87		
	31 to 40 years old	41	131.91		
	41 to 50 years old	16	137.03		
	More than 50 years old	6	118.50		

Table 9 reports a significant impact of the total lockdown on daily routine among individuals of five ethnic groups (Malay, Chinese, Indians, Indigenous ethnics of Borneo, and others) with a chi-square  $\chi^2$  value of 15.379  $p$ -value of 0.004. There is no variation between the five ethnic groups for family income, food access, medical health care, mental health treatment, social support from family and non-family members, pandemic-related stress, family conflict, and personal diagnosis of COVID-19 with an observed significance level of higher than 0.005. The most affected ethnic group because of the total lockdown concerning their daily routine is Indians with a mean rank of 151.17, followed by the Indigenous ethnics of Borneo (145.34). When compared to other ethnic groups, the Chinese had the least disruption to their daily lives as a result of the total lockdown, with a mean rank of 108.55.

Table 9

*K-W test results comparing the mean ranks of the total lockdown impact variable amongst ethnicity groups.*

Variable	Subgroup	N	Mean Rank	$\chi^2$	Asymp. Sig. ( $p$ )
K-W Test:					
Daily routine	Malay	73	140.82	$\chi^2=15.379$	0.004
	Chinese	54	108.55		
	Indians	49	164.22		
	Ethnic of Borneo	93	145.34		
	Others	10	135.50		
Family income/employment	Malay	73	121.75	$\chi^2=2.868$	0.580
	Chinese	54	146.33		
	Indians	49	151.17		
	Ethnic of Borneo	93	145.50		
	Others	10	133.10		
Food access.	Malay	73	142.96	$\chi^2=3.969$	0.410
	Chinese	54	139.72		
	Indians	49	144.50		
	Ethnic of Borneo	93	140.34		
	Others	10	94.70		



Medical health care access.	Malay	73	137.88	$X^2=2.033$	0.730
	Chinese	54	143.84		
	Indians	49	140.46		
	Ethnic of Borneo	93	142.35		
	Others	10	110.60		
Mental health treatment access.	Malay	73	132.99	$X^2=6.985$	0.137
	Chinese	54	152.87		
	Indians	49	152.14		
	Ethnic of Borneo	93	131.87		
	Others	10	137.80		
Access to extended family and non-family social supports.	Malay	73	133.01	$X^2=8.249$	0.083
	Chinese	54	127.44		
	Indians	49	166.32		
	Ethnic of Borneo	93	140.13		
	Others	10	128.65		
Experiences of stress related to the pandemic.	Malay	73	141.21	$X^2=9.230$	0.056
	Chinese	54	113.95		
	Indians	49	141.26		
	Ethnic of Borneo	93	153.62		
	Others	10	139.00		
Stress and family conflict.	Malay	73	142.31	$X^2=2.128$	0.712
	Chinese	54	135.25		
	Indians	49	151.28		
	Ethnic of Borneo	93	133.54		
	Others	10	139.95		
Personal diagnosis of coronavirus.	Malay	73	152.70	$X^2=7.418$	0.115
	Chinese	54	139.27		
	Indians	49	135.78		
	Ethnic of Borneo	93	132.04		
	Others	10	146.00		

Table 10 presents the significant impact of the total lockdown on family income, food access, mental health treatment, and family conflict among a group of individuals from three different employment types (Full-time, part-time, and not working). The chi-square value  $\chi^2$  for the family income (41.408) was the highest, followed by family conflict (10.644), food access (9.011), and access to mental health treatment (8.201). However, the significant level for daily routine (0.212), access to medical health care (0.059), support from family or non-family members (0.466), pandemic-related stress (0.172), and personal COVID-19 diagnosis (0.201) is greater than 0.05, implying that there is no population variation between the three groups.

The finding shows individuals who are currently not working are the most impacted group due to the total lockdown in terms of access to high-quality food (147.54), mental health treatment (145.85), and family conflict (147.46). Part-time workers are the most affected as to family income (172.36) during the total lockdown. Fully employed individuals are the least affected group in terms of family income, food access, mental health treatment, and family conflict, with mean ranks of 84.60, 115.65, and 112.19, respectively.

Table 10

*K-W test results comparing the mean ranks of the impact of total lockdown on the type of employment groups.*

Variable	Subgroup	N	Mean Rank	$\chi^2$	Asymp. Sig. (p)
			K-W Test:		
Daily routine	Full-time	60	125.13	$X^2=3.100$	0.212
	Part-time	7	138.14		
	Not working	212	144.27		
Family income/employment	Full-time	60	84.60	$X^2=41.408$	0.001
	Part-time	7	172.36		
	Not working	212	154.61		
Food access.	Full-time	60	115.65	$X^2=9.011$	0.011
	Part-time	7	120.36		
	Not working	212	147.54		
Medical health care access.	Full-time	60	121.21	$X^2=5.646$	0.059
	Part-time	7	130.29		
	Not working	212	145.64		
Mental health treatment access.	Full-time	60	120.81	$X^2=8.201$	0.017
	Part-time	7	127.36		
	Not working	212	145.85		
Access to extended family and non-family social supports.	Full-time	60	130.22	$X^2=1.529$	0.466
	Part-time	7	156.86		
	Not working	212	142.21		
Experiences of stress related to the pandemic.	Full-time	60	123.59	$X^2=3.525$	0.172
	Part-time	7	141.29		
	Not working	212	144.60		
Stress and family conflict.	Full-time	60	112.19	$X^2=10.644$	0.005
	Part-time	7	128.71		
	Not working	212	147.46		
Personal diagnosis of coronavirus.	Full-time	60	132.61	$X^2=3.204$	0.201
	Part-time	7	118.50		
	Not working	212	142.80		

## Discussion

According to the findings of this study, Malaysians trust government agencies, news portals, and television the most. Friends are the least trusted source, reinforcing the belief that Malaysians are well-informed about the pandemic. The Ministry of Health's daily briefings provides useful information on the number of cases, symptoms of infection, and preventive measures against contracting the virus. To slow the spread of the virus, a movement control order was issued under the Prevention and Control of Infectious Disease Act of 1988 and the Police Act of 1967.

As a result of a series of movement control orders and a total lockdown in Malaysia, Malaysians began to cultivate habits such as physical distancing, self-quarantining, and following the media coverage. This could imply that compliance with precautionary measures

occurred as new cultivated habits. The new habits are in line with WHO guidelines for containing the pandemic's spread. The finding is also consistent with the findings of Salman et al (2022), who found that Malaysians practice physical distancing and avoid public gatherings in order to protect themselves from COVID-19.

The findings indicate that Malaysians experience fear of infection, worry about family and friends, frustration, boredom, and changes in sleeping patterns as a result of the total lockdown. The study also identified single, younger, part-time, and unemployed people as the most disadvantaged groups in terms of income, family discord, and access to food and mental health treatments. Pierce et al. reported similar findings in 2020. The total lockdown restricts the movement of single and younger people, disrupting their social activities and livelihood, causing stress and family conflict. Months of total lockdown may have a significant impact on those who do not have a consistent monthly income. As a result, access to quality foods and mental health treatment will be difficult, as well as family relationships.

The daily routines of Indians and indigenous ethnics of Borneo are said to be the most affected in this study due to Malaysia's total lockdown. The indigenous ethnics of Borneo are part of the Bumiputera composition. The study's findings are justified because Bumiputera is Malaysia's majority ethnic group, while Indians are in the minority. As a result, their daily routine will be significantly altered in comparison to other ethnic groups. However, the findings can't be generalized to the whole population since the data of this study was collected during total lockdown using a convenient sampling technique.

Several agencies, including PERKESO, KWSP, and BNM, provide a variety of stimulus packages, programs, and moratoriums to help Malaysians deal with the financial consequences of the pandemic (Annuar, 2020; Cheng, 2020). The government also launched several initiatives to help SMEs, frontline workers, COVID-19 patients, and their families with financial issues (Bernama, 2020). The study can provide a basic understanding of the pandemic's most impacted groups. The study's findings can help the government allocate the stimulus package more effectively. As a result, the affected groups can be effectively assisted.

The findings could help us understand the effects of total lockdown on different groups of Malaysians. It can also provide fundamental information to policymakers, government agencies, and researchers when additional lockdown is required or if another pandemic occurs. As a result, better preparation and assistance can be properly planned in order to effectively manage the community's potential impact of total lockdown.

## **Conclusion**

Total lockdowns have shaped the daily routines and livelihoods of people all around the world. This study was conducted to investigate the trusted sources of information, new cultivated habits, personal experiences, and the most affected groups due to the series of total lockdowns. Malaysians rely on dependable resources and developed habits that help them avoid COVID-19 infection. A series of total lockdowns in Malaysia have had an impact on household income, access to quality foods, and mental health treatments, as well as causing family discord among Malaysia's young, single, unemployed, and part-time workers. Therefore, future research should look into the current situation of the affected groups following the pandemic. The likelihood of those groups struggling to survive is greater due to the insatiable economic conditions caused by the pandemic around the world. The study may

be able to provide extensive information for government agencies, policymakers, and non-governmental organizations (NGOs) to effectively assist affected groups.

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