

## **A SHORT SURVEY ON PHYSICAL HEALTH, MENTAL HEALTH, AND DIETARY PATTERNS DUE TO COVID-19 LOCKDOWNS**

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### **ABSTRACT**

Due to the pandemic, the physical health, mental health, and dietary patterns of the people in India were impacted. The research was conducted to assess the effects and a questionnaire was developed with two sections excluding the demographic details. A sample of 36 participants was collected in which 25 were female (69.4%) and 11 were male (30.6%). Results show that the physical health and mental health were affected and dietary patterns have shown variations. We have then compared them with researches conducted by others across the world and we found similarities in the change of mental health and physical health status along with change in dietary patterns among people across the world. This research will form the foundation for similar research of these areas.

**Keywords:** Covid-19, Physical Health, Mental Health, Dietary Habits.

### **INTRODUCTION**

In a matter of months, the whole world has been shattered. Millions have died and millions are suffering from a deadly virus that was previously unknown before it appeared in Wuhan in December, 2019. The novel coronavirus, causing the disease Covid-19 has not only affected the lives of people getting infected by it but has also changed the lives of others drastically. On January 30, 2020, the World Health Organization (WHO) declared that the new coronavirus outbreak is a public health emergency of international concern, a pandemic.

Emotional, psychological, and social well-being are all parts of mental health. It affects behavior, perception, and cognition. It also affects how they cope with stress, interact with others, and make decisions. The repercussions on mental health were not as bad before the pandemic as they

are now. The benefits of being outside are linked to spending time outside, but the COVID- 19 public health regulations, which pushed people to stay home unless necessary, probably had an impact on people's chances to be outside. During the pandemic, physical activity disruptions, and mental health are significantly linked, however restoring physical activity through a short- term intervention does not assist enhance mental health.

Physical health is defined as the state of your body, considering everything from the absence of illness to your degree of fitness. Physical activity levels were predicted to fall due to these lockdown restrictions. On the other hand, it might also be claimed that altering one's way of life can encourage the development of new exercise routines.

The effects on individuals' physical, mental health, and dietary habits due to Covid-19 are discussed in this research article. The lockdown that this virus has imposed has psychological, behavioral, and interpersonal impacts on people, according to psychologists. It has quickly affected both the physical and mental health of people. It is very contagious and has the potential to cause major respiratory issues. Many people have started using alcohol, drugs, and gambling as a result of increased social isolation, loneliness, health, anxiety, stress, and the economic crisis, making their lives increasingly difficult. The prevalence of anxiety, sadness, self-harm, suicide, and other mental illnesses is rising, which has an impact on people's wellbeing.

In their study, Sydney L. Cindrich et al. used secondary analyses of cross-sectional data from the COVID and Well-being Study to examine the effects of acute COVID-19 public health restrictions on outside time in April 2020. They quantified the relationship between outside time and stress and positive mental health. Participants (n = 3,291) provided information on their demographics, health-related activities, amount of time spent outside of pre/post COVID-19 public health limitations (categorized as increased, maintained, or decreased), present stress (perceived stress scale-4), and positive mental health (Short Warwick-Edinburgh Mental Wellbeing Scale). The reduction in outdoor time was caused by COVID-19 regulations. Following the COVID-19 restrictions, participants who increased or maintained outside time reported less stress and higher levels of positive mental health compared to participants who decreased outside time.

Carmen et. al. set out to analyze how the COVID-19 pandemic home lockdown affected the dietary preferences and way of life of the Andalusian populace. Using snowball sampling and social networks, an online survey was sent and 1140 persons in total responded to the survey.

The questionnaire has 34 questions divided into three categories: sociodemographic information, job, and leisure activities, and food consumption questions. There were pre- and post-lockdown

details provided for each item. Three age groups were assigned to the participants: 18–35, 36–65, and over 65. There were statistically significant variations between the three groups, with the younger age group seeing the greatest improvements, including an increase in physical activity and fresh food consumption and a decrease in fast food consumption at home and alcohol use.

Mauro Lombardo et al. analyzed the pre- and post-lockdown data of 118 people to assess the potential health consequences. Contrary to popular opinion, we found that people's intake of fresh veggies, whole grains, and water increased dramatically during the lockdown. However, positive developments were coupled with negative ones, such as a rising prevalence of sleeping issues. Our findings show that the pandemic-related lockdowns altered participants' social behavior, with fewer people reporting dining out or in a company.

The study by Jacob et al. sought to investigate the influence of the pandemic on physical activity and sedentary behavior in a sample of university students and workers both before and after the institution canceled face-to-face classes and closed campus. Participants (N = 398) completed the validated Godin physical activity questionnaire and the International Physical Activity Questionnaire, which measured physical activity and sedentary behavior before and after face-to-face class cancellation. Participants were further divided into three groups (low, moderate, and high physical activity) based on a tertile split of overall physical activity prior to the pandemic. The high activity group decreased physical activity, but the moderate and low activity groups increased physical activity.

Sithum et al. examined changes in physical activity, eating habits, and overall well-being throughout the early stages of this strategy. A group of 582 young individuals aged 13 to 19 from Sydney was followed prospectively for 22 weeks (November 18, 2019, to April 19, 2020). Diet, physical activity, sedentary behavior, well-being, and psychological distress trajectories were gathered daily, weekly, and monthly by smartphone, utilizing a series of ecological momentary evaluations and smartphone sensors. Differences in health and well-being outcomes were evaluated before and after physical distancing rules were implemented. Physical activity decreased significantly after the installation of physical distancing measures in NSW, whereas social media and Internet use increased, and screen time increased based on participants' smartphone screen state. Physical remoteness was also linked to being alone in the preceding hour, lower happiness, and fast food intake.

Joana Nogueira et. al. intended to evaluate how COVID-19 influenced the overall psychological functioning of Portuguese individuals by comparing present data to pre-COVID-19 status. The study included 150 subjects who were cognitively healthy. Although subjective cognitive decline

complaints rose dramatically throughout the epidemic, the results suggest overall maintenance of cognitive skills. In terms of mental health, restraint measures resulted in a worsening of depression and a decrease in perceived quality of life, which were connected with feelings of loneliness and perceived social isolation. Finally, greater levels of pre-COVID-19 quality of life appear to protect against depression and anxiety, as well as predict less difficulty with emotion regulation, feelings of solitude, and cognitive problems.

Lance M. McCracken et al. conducted a national, online, cross-sectional survey to administer standardized measures of depression, anxiety, and insomnia, as well as measures of risk and vulnerability factors known to be associated with poor mental health outcomes. Our data suggest that depression, anxiety, and insomnia are significant in Sweden, with a prevalence of 30%, 24.2%, and 38%, respectively. Poor self-rated overall health and a history of mental health disorders were the biggest predictors of these outcomes. The presence of COVID-19 symptoms, as well as particular health and financial concerns associated with the pandemic, appeared to be significant.

At post-treatment, there were moderate to strong between-group effects in favor of the therapy on measures of depression [Beck Depression Inventory (BDI); Patient Health Questionnaire] and anxiety [Generalized Anxiety Disorder-7-item scale (GAD-7)]. This was also seen for stress symptoms [Perceived Stress Scale (PSS-14)]. There were no impacts on measures of quality of life, insomnia, PTSD symptoms, or anger. There was an impact on alcohol consumption [Alcohol Use Disorder Identification Test (AUDIT)], although it was not clinically significant.

A cross-sectional survey was undertaken in more than 20 Libyan cities between May and June 2020. The survey included basic demographic information on the participants as well as anxiety symptoms evaluated using the seven-item Generalized Anxiety Disorder scale (GAD-7). A total of 8084 responses were collected, with 5090 (63%) being female and 2994 (37%) being male. Only 1145 (14.2 percent) of the participants met the cut-off score for detecting anxiety symptoms; however, only five of the study variables were predictors of clinically significant anxiety: age, gender, marital status, work status, being a financial supporter for the family, and being infected with COVID-19. Women were 1.19 times as likely as males to have anxiety symptoms. When compared to not being married, increasing age was substantially related to a lower risk of displaying anxiety symptoms, but being married was significantly associated with a higher likelihood of exhibiting anxiety symptoms. Suspension from employment was linked to an increase in the incidence of anxiety symptoms. However, being infected with COVID-19 was related to a 9.59-fold increased likelihood of experiencing severe anxiety symptoms. During the lockdown, 1451 (17.9 %) of research participants reported physical and/or verbal abuse from

family members, 958 (11.9 %) reported abuse from outside the family, and 641 (7.9 %) reported assault by enforcers.

**Rationale** - There have been several studies on these areas, but more study is needed to better understand the impact of COVID-19 on individuals' physical health, mental health, and dietary patterns. This is the foundational research that will help us to understand the consumption patterns of different goods and services.

## **METHODOLOGY**

### **Aim:**

To assess the impact of the Novel Coronavirus Pandemic on individuals' physical health, mental health, and dietary patterns.

### **Research Question:**

How has the Novel Coronavirus Pandemic impacted the physical health, mental health, and dietary patterns of the individuals?

### **Sample and its Selection:**

A random sample of participants was taken to assess the pre, during, and post Covid-19 effects on the physical health, mental health, and dietary patterns of individuals. The sample space comprises individuals from diverse age groups. Out of 36 candidates, 77.8% of them were from the age groups of 13-18 years and 22.6% were above 30 years of age. The candidate selection is done to better understand the consumption pattern among individuals.

### **Description of Tools Employed:**

A pilot survey was conducted in January 2022 by the author, with the assistance of Google Forms. The questionnaire was a combination of open-ended and closed-ended questions, which used the linear scale technique from 1 to 5, multiple-choice questions, and checkboxes. The questionnaire consisted of 33 different questions, 15 from Physical Health and 18 from Mental Health, split into three sections. The first section included questions about the sociodemographic and health characteristics of the respondents, such as region, gender, height bracket, weight bracket, etc. The second section sought information about individual behavior and the pre, during, and post-COVID-19 effects on Physical Health, such as consumption of ready-made or fresh foods, channels of consumption of food items, diet and workout activity levels, etc. Finally,

the third section included questions about the positive (e.g., calm, optimistic, and excited) and negative (e.g., nervous, bored, loneliness, and scared) emotions during the pandemic. It delivers information about the impact of lockdown and the pandemic, in general, on the Mental Health of individuals. The questionnaire was self-administered and the researcher administered it.

**Procedure:**

The author tried to maintain the privacy of the data collected. The informed consent is taken from all the participants. The questionnaire was shared and responses were collected. In the questionnaire, the individuals were asked about their demographic details, physical health, and mental health. The survey took around 15 minutes to fill.

**Analysis:**

The analysis of this study was done with the help of the review of literature as well as the data collected by the survey. A comparative analysis was conducted and statistical graphs were used.

Comparative analysis refers to the comparison of two or more processes, documents, data sets, or other objects. Pattern analysis, filtering, and decision-tree analytics are forms of comparative analysis.

It involves taking one entity or piece of data, such as a statement, an interview, or a theme, and comparing it with others to identify similarities or differences. By isolating these aspects, it is then possible to develop a conceptual model of the possible relations between various entities.

There are two main approaches to organizing a comparative analysis:

- Alternating (point-by-point) method: Find commonalities between each subject and alternate writing about them.
- Block (subject-by-subject) method: Discuss the entire first subject, then the entire second.

The researcher used the Alternating Method to compare past studies on customer behavior with their own study using a survey.

**RESULTS**

**Table 1. The table represents the data on change in exercise and the equipment used in Covid-19 lockdowns.**

Fitness	Responses				
Started something new for your physical health	Yes (34) (94.4%)	No (2) (5.6%)			
Regular workout	Most of the time (20) (55.6%)	Sometimes (11) (30.6%)	Very little (4) (11.1%)	Never (1) (2.8%)	
Changes in consumption of fitness equipment	Completely Agree (8) (22.2%)	Agree (11) (30.6%)	Neutral (7) (19.4%)	Disagree (2) (5.6%)	Completely Disagree (8) (22.2%)

**Table 2. The table represents the data on the consumption of food during Covid-19 lockdowns.**

Consumption of food	Completely Agree	Agree	Neutral	Disagree	Completely Disagree
Increase in consumption of ready-made food	1 (2.8%)	8 (22.2%)	15 (41.7%)	8 (22.2%)	4 (11.1%)
Change in consumption of fresh foods	5 (13.9%)	7 (19.4%)	10 (27.8%)	5 (13.9%)	9 (25%)
Missing household meals more frequently	0	1 (2.8%)	2 (5.6%)	9 (25%)	24 (66.7%)

**Table 3. Shows the data on the choices of the food consumption of the individuals.**

<b>Food consumption choices</b>	<b>Responses</b>
Dine-In	19 (52.8%)
Dine-Out	17 (47.2%)
Supermarkets	17 (47.2%)
Farm markets	10 (27.8%)
Home delivery	20 (55.6%)

**Table 4. The table represents the data on different factors of mental health during Covid-19 lockdowns.**

<b>Mental health Factor</b>	<b>Responses</b>			
Has your sleeping pattern changed during the lockdown?	Yes (29) (80.6%)	No (7) (19.4%)		
Feeling lower than usual	Most of the time (6) (16.7%)	Sometimes (19) (52.8%)	Very little (7) (19.4%)	Never (4) (11.1%)
Bothered by little interest in activities	Most of the time (6) (16.7%)	Sometimes (15) (41.7%)	Very little (11) (30.6%)	Never (4) (11.1%)



Stress	Most of the time (4) (11.1%)	Sometimes (19) (52.8%)	Very little (9) (25%)	Never (4) (11.1%)
Hopelessness	Most of the time (2) (5.6%)	Sometimes (13) (36.1%)	Very little (15) (41.7%)	Never (6) (16.7%)
Nervous	Most of the time (3) (8.3%)	Sometimes (17) (47.2%)	Very little (10) (27.8%)	Never (6) (16.7%)
Anxious	Most of the time (11) (30.6%)	Sometimes (10) (27.8%)	Very little (9) (25%)	Never (6) (16.6%)
On the edge	Most of the time (3) (8.3%)	Sometimes (11) (30.6%)	Very little (13) (36.1%)	Never (9) (25%)

**Table 5. Shows data on the effect on mental health due to Covid-19 lockdowns.**

Effect on mental health	Responses				
How did the first three months of the COVID-19 pandemic make you feel?	Positive (9) (25%)	Negative (17) (47.2%)	I can't decipher my feelings (10) (27.8%)		
In what way has the pandemic impacted your overall mental health?	Positively (7) (19.4%)	Negatively (10) (27.8%)	Moderately (19) (52.8%)		
How has the pandemic impacted your overall mental health?	Not at all (3) (8.3%)	Not much (7) (19.4%)	Neutral (7) (19.4%)	A little (14) (38.9%)	To a great extent (5) (13.9%)

**Table 6. The table shows the data on the eating pattern of the individuals and their change due to the Covid-19 lockdowns.**

Eating pattern	Responses				
Has your eating pattern changed?	Completely Agree (6) (16.7%)	Agree (4) (11.1%)	Neutral (13) (36.1%)	Disagree (6) (16.7%)	Completely Disagree (7) (19.4%)
How many meals did you have before the COVID-19	1 (0)	2 (4) (11.1%)	3 (28) (77.8%)	4 (4) (11.1%)	

pandemic?					
During the COVID-19 pandemic, did you eat more or less than normal?	More than normal (5) (13.9%)	Normal (26) (72.2%)	Less than normal (5) (13.9%)		

**DISCUSSION**

The purpose of this research paper is to evaluate the impact of the novel coronavirus pandemic on individuals’ physical, mental health, and dietary habits. According to our findings, 94.4% of respondents began exercising during the epidemic. Jacob E. Barkley et. al. discovered that the high activity group reduced physical activity whereas the moderate and low activity groups increased physical activity. Carmen (2022) also discovered statistically significant variations between the three groups, with the younger age group undergoing the most changes, increasing their physical activity and consumption of fresh food while lowering their consumption of fast food at home and alcohol use. Participants in our research reported no change in their fresh food and alcohol use.

Mauro Lombardo et. al. discovered a considerable increase in raw vegetables, whole grains, and water intake. However, positive developments were coupled with negative ones, such as a rising prevalence of sleeping issues. According to our statistics, 80.6 % of people reported a change in their sleeping routine. The data from the study of Mauro Lombardo showed that the pandemic's lockdowns also altered participants' social behavior, with fewer people reporting dining out or in a company. On the contrary, 47.2 % of those surveyed said they wanted to eat out. According to Lance M. McCracken et. al., there are considerable levels of depression, anxiety, and sleeplessness in Sweden, with rates of 30%, 24.2 %, and 38%, respectively. Poor self-rated overall health and a history of mental health disorders were the biggest predictors of these outcomes. According to our findings, 30.1% of participants felt mostly anxious throughout the pandemic.

According to Sydney L. Cindrich, individuals who increased or maintained outdoor time after COVID-19 limitations reported lower stress and greater positive mental health than those who decreased outside time. According to our results, 11.1 % of respondents reported being mostly

stressed. According to Joana Nogueira and others, in terms of mental health, restraint measures resulted in a worsening of depression and a decrease in perceived quality of life, which were connected with feelings of loneliness and perceived social isolation. According to our findings, 36.1 % of individuals experienced pessimism at some point throughout the epidemic, whereas % experienced nervousness.

## CONCLUSION

This research paper has set the tone for future research endeavors. All our results found echoes in research done by other researchers across the world yet there have been changes in behavior that our research has been able to capture. Our comparative analyses show that the trends in physical health, mental health, and dietary patterns are similar in different regions and demographics. We need a more in-depth understanding of the impact that COVID has had and how people's behavior is changing post the pandemic.

This research has many challenges which should be overcome by future research such as sample size, and more standardization of the sample selection based on region, language, age, and other demographic factors. Future research can also go deeper into the socio-psychological impact on health due to isolation during lockdowns and many other areas.

## REFERENCES

Andrews, M. A., Areekal, B., Rajesh, K. R., Krishnan, J., Suryakala, R., Krishnan, B., ... & Santhosh, P. V. (2020). First confirmed case of COVID-19 infection in India: A case report. *The Indian journal of medical research*, 151(5), 490. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7530459/#:~:text=On%20December%20>

[31%2C%202019%2C%20China,city%2C%20Hubei%20province%20of%20China.](#)

*COVID-19 Public Health Emergency of International Concern (PHEIC) Global research and innovation forum.* (2020, February 12). World Health Organization. [https://www.who.int/publications/m/item/covid-19-public-health-emergency-of-international-concern-\(pheic\)-global-research-and-innovationforum#:~:text=On%2030%20January%202020%20following.of%20International%20Concern%20\(PHEIC\).](https://www.who.int/publications/m/item/covid-19-public-health-emergency-of-international-concern-(pheic)-global-research-and-innovationforum#:~:text=On%2030%20January%202020%20following.of%20International%20Concern%20(PHEIC).)

Wikipedia contributors. (2022b, July 12). *Mental health*. Wikipedia. [https://en.wikipedia.org/wiki/Mental\\_health#:~:text=Mental%20health%20encompasses%20emotional%2C%20psychological,relationships%2C%20and%20decision%2Dmaking.](https://en.wikipedia.org/wiki/Mental_health#:~:text=Mental%20health%20encompasses%20emotional%2C%20psychological,relationships%2C%20and%20decision%2Dmaking.)

Cindrich, S. L., Lansing, J. E., Brower, C. S., McDowell, C. P., Herring, M. P., & Meyer, J. D. (2021). Associations between change in outside time pre-and post-COVID-19 public health restrictions and mental health: brief research report. *Frontiers in public health*, 9, 619129. <https://pubmed.ncbi.nlm.nih.gov/33585393/>

Giuntella, O., Hyde, K., Saccardo, S., & Sadoff, S. (2021). Lifestyle and mental health disruptions during COVID-19. *Proceedings of the National Academy of Sciences*, 118(9). <https://doi.org/10.1073/pnas.2016632118>

*Physical health*. (2020, March 27). EUPATI Toolbox. [https://toolbox.eupati.eu/glossary/physicalhealth/#:~:text=Physical%20health%20is%20defined%20as,behaviour%20\(for%20instance%2C%20smoking\)%3B](https://toolbox.eupati.eu/glossary/physicalhealth/#:~:text=Physical%20health%20is%20defined%20as,behaviour%20(for%20instance%2C%20smoking)%3B)

Hargreaves, E. A., Lee, C., Jenkins, M., Calverley, J. R., Hodge, K., & HougeMackenzie, S. (2021). Changes in physical activity pre-, during and post-lockdown COVID-19 restrictions in New Zealand and the explanatory role of daily hassles. *Frontiers in Psychology*, 12, 642954. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.642954/full>

Cindrich, S. L., Lansing, J. E., Brower, C. S., McDowell, C. P., Herring, M. P., & Meyer, J. D. (2021). Associations between change in outside time pre-and post-COVID-19 public health restrictions and mental health: brief research report. *Frontiers in public health*, 9, 619129. <https://www.frontiersin.org/articles/10.3389/fpubh.2021.619129/full>

Navarro-Pérez, C. F., Fernández-Aparicio, Á., González-Jiménez, E., Montero-Alonso, M. Á., & Schmidt-RioValle, J. (2022). Effects of COVID-19 lockdown on the dietary habits and lifestyle in a population in southern Spain: A cross-sectional questionnaire. *European Journal of Clinical Nutrition*, 76(6), 883-890. <https://www.nature.com/articles/s41430-021-01034-w>

Lombardo, M., Guseva, E., Perrone, M. A., Müller, A., Rizzo, G., & Storz, M. A. (2021). Changes in Eating Habits and Physical Activity after COVID-19 Pandemic Lockdowns in Italy. *Nutrients*, 13(12), 4522. <https://www.mdpi.com/2072-6643/13/12/4522/htm>

Barkley, J. E., Lepp, A., Glickman, E., Farnell, G., Beiting, J., Wiet, R., & Dowdell, B. (2020). The acute effects of the COVID-19 pandemic on physical activity and sedentary behavior in university students and employees. *International journal of exercise science*, 13(5), 1326. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7523895/>

Munasinghe, S., Sperandei, S., Freebairn, L., Conroy, E., Jani, H., Marjanovic, S., & Page, A. (2020). The impact of physical distancing policies during the COVID-19 pandemic on health

and well-being among Australian adolescents. *Journal of Adolescent Health*, 67(5), 653-661. <https://www.sciencedirect.com/science/article/pii/S1054139X20304912>

Nogueira, J., Gerardo, B., Silva, A. R., Pinto, P., Barbosa, R., Soares, S., ... & Freitas, S. (2021). Effects of restraining measures due to COVID-19: Pre-and post-lockdown cognitive status and mental health. *Current Psychology*, 1-10. <https://link.springer.com/article/10.1007/s12144-021-01747-y>

McCracken, L. M., Badinlou, F., Buhrman, M., & Brocki, K. C. (2020). Psychological impact of COVID-19 in the Swedish population: Depression, anxiety, and insomnia and their associations to risk and vulnerability factors. *European Psychiatry*, 63(1). [https://www.cambridge.org/core/services/aop-cambridgecore/content/view/77E4C9F13F8BC8A7F8211D5B41C0E59D/S0924933820000814a.pdf/psychological\\_impact\\_of\\_covid19\\_in\\_the\\_swedish\\_population\\_depression\\_anxiety\\_and\\_in\\_somnia\\_and\\_their\\_associations\\_to\\_risk\\_and\\_vulnerability\\_factors.pdf](https://www.cambridge.org/core/services/aop-cambridgecore/content/view/77E4C9F13F8BC8A7F8211D5B41C0E59D/S0924933820000814a.pdf/psychological_impact_of_covid19_in_the_swedish_population_depression_anxiety_and_in_somnia_and_their_associations_to_risk_and_vulnerability_factors.pdf)

Aminoff, V., Sellén, M., Sörliden, E., Ludvigsson, M., Berg, M., & Andersson, G. (2021). Internet-based cognitive behavioral therapy for psychological distress associated with the COVID-19 pandemic: a pilot randomized controlled trial. *Frontiers in Psychology*, 12, 1998. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.684540/full>

Msherghi, A., Alsuyhili, A., Alsoufi, A., Ashini, A., Alkshik, Z., Alshareea, E., ... & Elhadi, M. (2021). Mental health consequences of lockdown during the COVID-19 pandemic: a cross-sectional study. *Frontiers in Psychology*, 12, 605279. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.605279/full>

Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die?. *Journal of business research*, 117, 280-283. <https://www.sciencedirect.com/science/article/pii/S0148296320303647>

Kaushal, V., & Srivastava, S. (2021). Hospitality and tourism industry amid COVID-19 pandemic: Perspectives on challenges and learnings from India. *International journal of hospitality management*, 92, 102707. <https://www.mdpi.com/2304-8158/10/5/1069>

Appendix

Figure 1. The data represents change in exercise and the equipments used in Covid-19 lockdown.

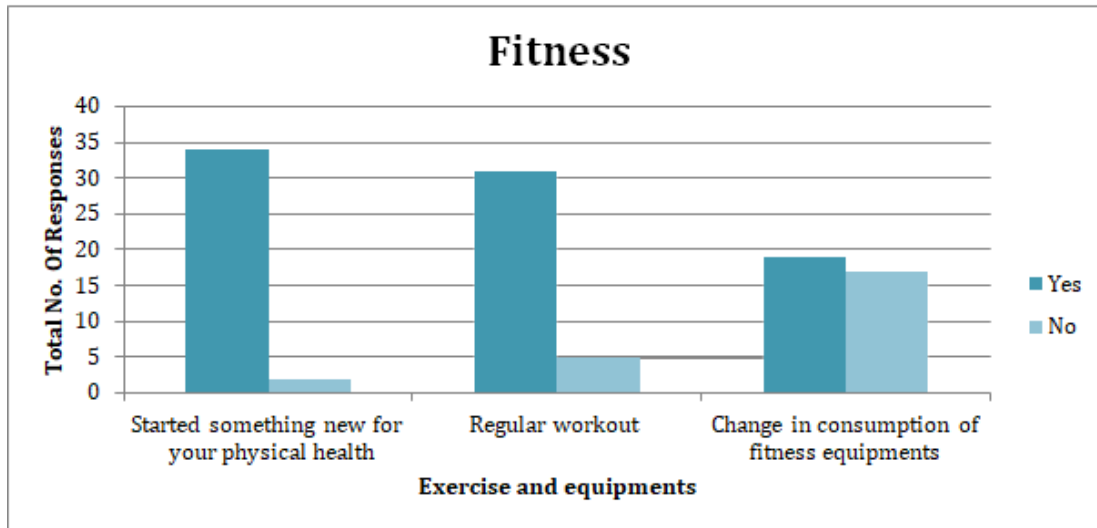


Figure 2. The bar graph represents the data on the consumption of food during Covid-19 lockdowns.

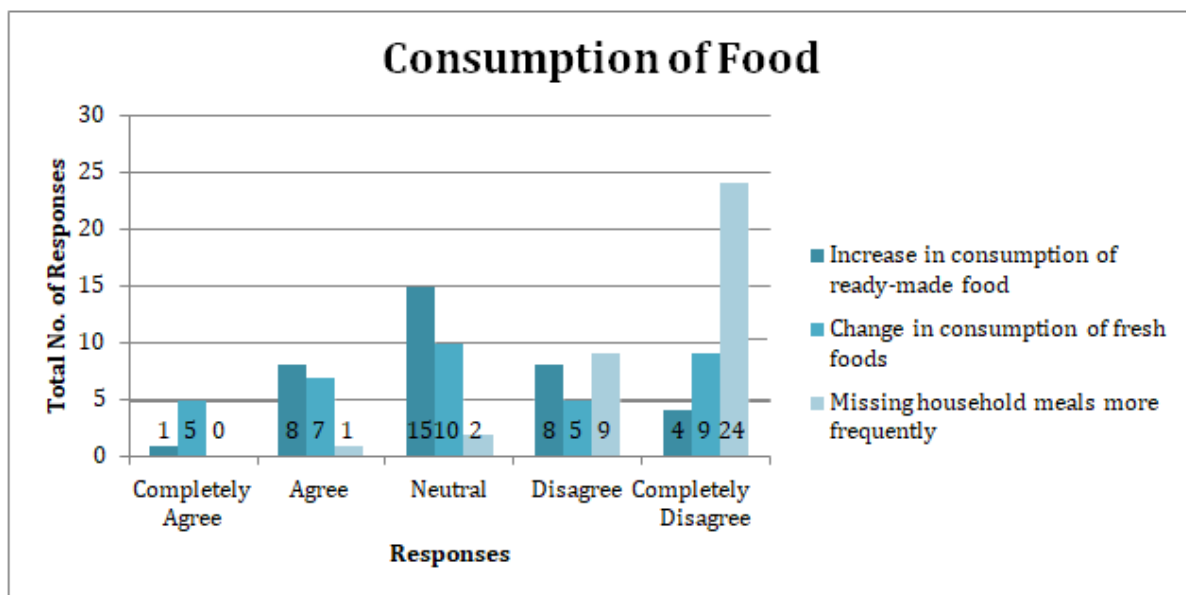


Figure 3. Shows the data on the choices of the food consumption of the individuals

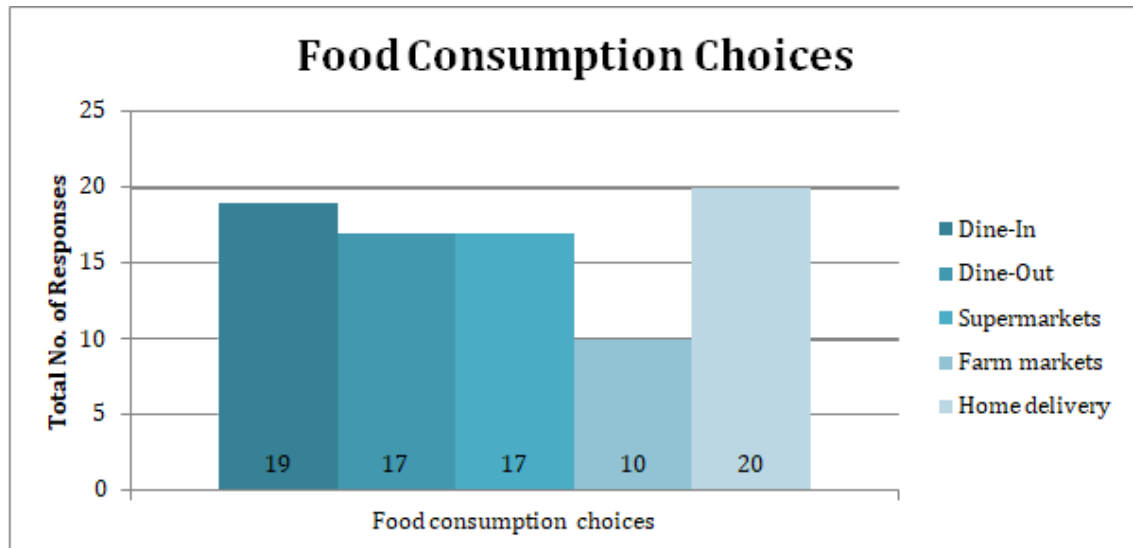


Figure 4. The table represents the data on different factors of mental health during Covid-19 lockdowns

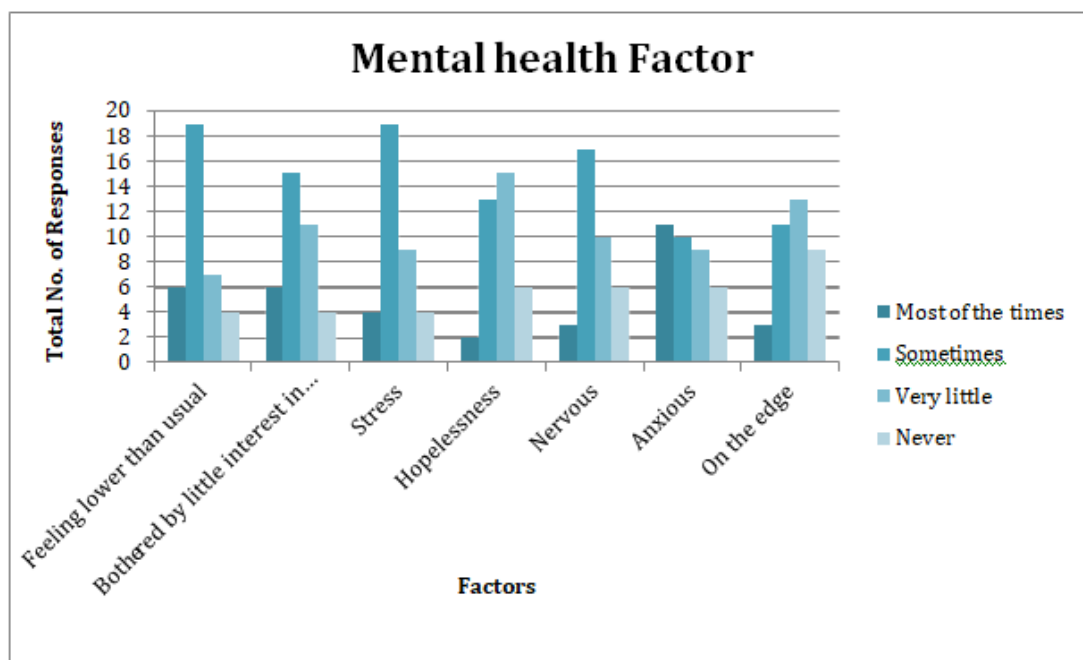




Figure 5. Shows data on the affect on mental health due to Covid-19 lockdowns

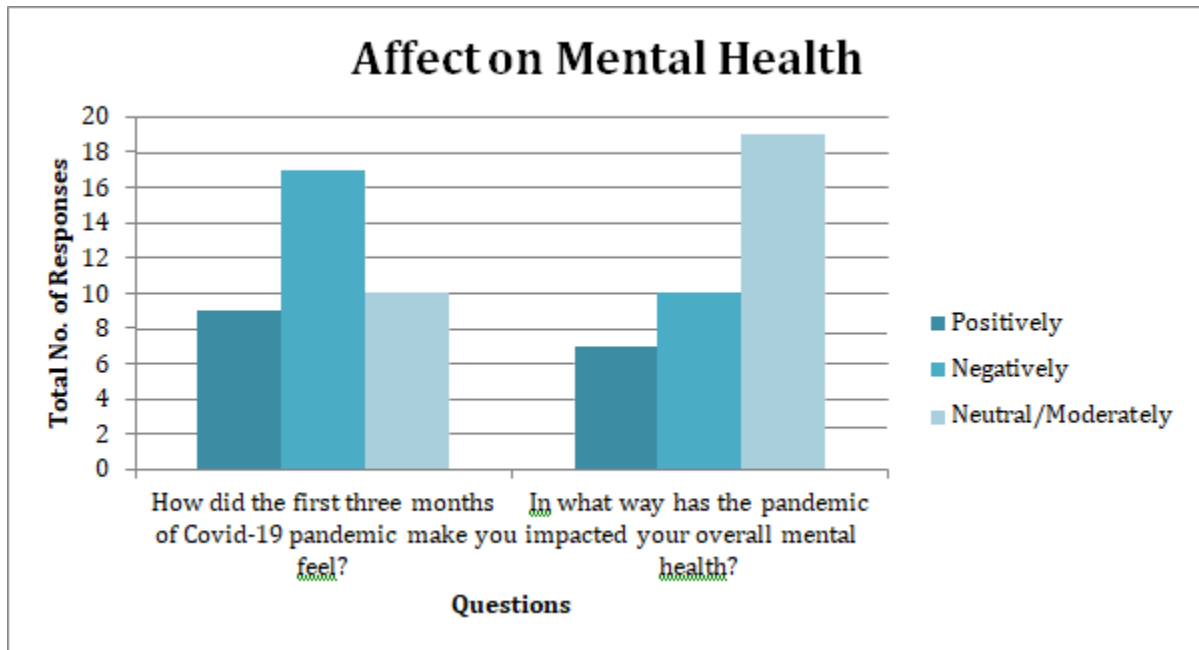


Figure 6. The pie chart shows the data on the eating pattern of the individuals and their changed due to the Covid-19 lockdowns

