

Internship Training

at

Nada India Foundation

Title: **Study to Understand the Effects of Covid-19 restrictions on mental well-being of Working Population in India.**

by

Dr. Servleen Kaur

PG/20/068

Under the guidance of

Dr. Vinay Tripathi

PGDM (Hospital and Health Management)

2020-22



International Institute of Health Management Research
New Delhi

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**International Institute of Health Management Research
New Delhi**

The certificate is awarded to

Dr. Servleen Kaur

in recognition of having successfully completed her internship in the department of

Project Management

and has successfully completed his/her Project on

Study to Understand the Effects of Covid-19 Restrictions on Mental Well-being of working population in India.

Date- 17/04/2022

Organization- **Nada India Foundation**

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.

We wish him/her all the best for future endeavors.

Training & Development

Deepshikha Chumara

Zonal Head-Human Resources

TO WHOMSOEVER IT MAY CONCERN

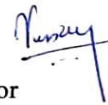
This is to certify that **Dr. Servleen Kaur**, student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at **Nada India Foundation** from **10/04/2022** to **10/06/2022**.

The Candidate has successfully carried out the study designated to him during internship training and his/her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements. I wish him all success in all his/her future endeavors.



Dr. Sumesh Kumar
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi



Mentor

IIHMR, New Delhi

Certificate of Approval

The following dissertation titled **"Study to assess the impact of Covid-19 restrictions on mental well-being of working-class population in India"** at **"Nada India Foundation"** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

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Certificate from Dissertation Advisory Committee

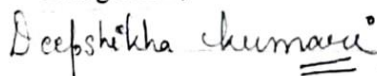
This is to certify that **Dr. Servleen Kaur**, a graduate student of the **PGDM (Hospital & Health Management)** has worked under our guidance and supervision. He/ She is submitting this dissertation titled “**Study to understand the effects of Covid-19 restrictions on mental well-being of working population in India.**” at “Nada India Foundation” in partial fulfillment of the requirements for the award of the **PGDM (Hospital & Health Management)**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.


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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Study to understand the effects of Covid-19 restrictions on mental well-being and productivity of working population in India**” and submitted by **Dr. Servleen Kaur** Enrollment No **PG/20/068** under the supervision of **Dr. Vinay Tripathi** for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from **10/04/2022** to **12/04/2022** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.



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FEEDBACK FORM

Name of the Student: Dr. Servleen Kaur

Name of the Organization in Which Dissertation Has Been Completed: Nada India Foundation

Area of Dissertation: Assessment of working-class population amidst the COVID-19 restrictions

Attendance:

Objectives achieved: Objectives of the internship achieved

Deliverables: Report submitted and presentation made

Strengths: Good domain knowledge

Suggestions for Improvement:

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

Signature of the Officer-in-Charge/ Organisation Mentor

(Dissertation) Deepshikha kumari

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CONTENTS

So. No.	TOPIC	Page No.
1.	Introduction..... Background Objectives	
2.	Review of Literature.....	
3.	Methodology.....	
4.	Results..... Demographic Characteristics Mental Well-being parameters Productivity parameters Work-mode preference Demographic distribution of Mental Well-being Parameters Demographic distribution of Productivity Parameters	
5.	Discussion.....	
6.	Recommendation.....	
7.	Limitations.....	
8.	Conclusion.....	
9.	Reference.....	

LIST OF TABLES

So. No.	Table No.	Topic	Page no.
1	Table 1	Demographic characteristics	
2	Table 1.1	Gender distribution of participants with impacted mental-well being	
3	Table 1.2	Age-wise distribution of participants with impacted mental-well being	
4	Table 1.3	Marital Status distribution of participants with impacted mental-well being	
5	Table 1.4	Years of Professional Experience of participants with impacted mental-well being	
6	Table 2.1	Gender distribution of participants with impacted productivity	
7	Table 2.2	Age-wise distribution of participants with impacted productivity	
8	Table 2.3	Marital Status distribution of participants with impacted productivity	
9	Table 2.4	Years of Professional Experience of participants with impacted productivity	

LIST OF FIGURES

So. No.	Figure No.	Topic	Page no.
1	fig 1	Shows graphical representation of mental well-being parameters of the participants	
2	fig 2	Shows graphical representation of productivity parameters of the participants	
3	fig 3	Work mode preference	
4	fig 2.1.1	Gender distribution of Work mode preference	
5	fig 2.2.2	Marital status distribution of Work mode preference	
6	fig 2.3.3	Years of Professional Experience distribution of Work mode preference	

INTRODUCTION

Background

COVID-19 infection with its widespread reach and spread was declared a Public Health Emergency of International Concern (PHEIC) by WHO on 30th January, 2020[1]. The virus quickly spread over the world in the weeks that followed, causing governments in afflicted nations to enact lockdown measures in order to reduce transmission rates and avoid overcrowding in healthcare settings. India entered into complete a lockdown state on 24th March, 2020 to limit the spread of the virus, limiting the movement of entire population of the country[2]. The lockdown continued to be observed in phases till June, 2021 in various parts of the country till the community spread was controlled.

The restriction measures were variable across the states depending upon the viral spread in particular regions but more or less included border controls, the closure of schools, markets, restaurants, non-essential shops, bars, entertainment and leisure facilities, and the prohibition of all public and private events and gatherings. As a result, a large portion of the working population was suddenly confronted with significant changes in their daily lives. Many employees were furloughed or laid off as many businesses and industries had to shut down, and health personnel in emergency rooms, grocery staff, and other vital employees suffered a huge rise in workload and workplace strain [3].

Rationale of the study

Several studies imply that working conditions have deteriorated as a result of the COVID-19 crisis, and that employees are more prone to develop mental health issues such as stress, depression, and anxiety. Furthermore, social isolation, contradictory messages from authorities, and a continual state of ambiguity have all been identified as major contributors to emotional discomfort and negatively impacting mental health and well-being[4,5]. Employees have faced obstacles as a result of the rigorous steps implemented to control the spread of the disease, and there has been a significant adjustment in the way we work since the initiation of lockdown measures. Most professional branches have been compelled to approach work-related duties in novel ways: working from home, working alone, working in small groups, etc., making it more difficult to communicate with supervisors and co-workers, among other things.

These abrupt changes have elevated the importance of employee well-being, which may present unique issues for diverse groups of employees. Employees performing critical duties may experience mental health issues, stress, and anxiety, whereas employees working remotely may experience loneliness and isolation, which has been linked to depression, suicidal behaviour, and other mental health problems[6]. All the factors listed, have contributed in affecting the mental health and reducing the productivity of the working class employees.

It is due to the above-mentioned reasons that a need is felt to analyse the impact of the lockdown on the population. There have been many studies conducting the analysis, but there are few studies that observe the impact, the pandemic has caused on the working class population and thereby affecting their dedication and productivity towards work. The objective of this study is to understand the impact of the restrictions laid down during the

pandemic on the mental well-being of the employees the secondary objective is to analyse the impact on the productivity of the employees.

Objectives of the study

The objectives of the study are to analyse:

1. The understand the effects of COVID-19 restrictions on mental well-being of working population in India.
2. The understand the effects of COVID-19 restrictions on productivity of working population in India.

LITERATURE REVIEW

A primary cross-sectional research was conducted to study the implications of COVID-19 on mental health and substance use by Nirmita Panchal, Rabah Kamal , Cynthia Cox and Rachel Garfield in USA in 2022 to understand the mental health needs of the population experiencing COVID-19 restrictions.

Compared to all adults, young adults are more likely to report substance use (25% vs. 13%) and suicidal thoughts (26% vs. 11%). During the pandemic, adults in households with job loss or lower incomes report higher rates of symptoms of mental illness than those without job or income loss (53% vs. 32%). Women with children are more likely to report symptoms of anxiety and/or depressive disorder than men with children (49% vs. 40%)[7].

An observational study on work-related and personal factors associated with mental well-being during the COVID-19 response was conducted in August, 2020 by Bradley A Evanoff and his to assess the prevalence of stress, anxiety, depression, work exhaustion, burnout, and decreased well-being among faculty and staff at a university and academic medical centre during the SARS-CoV-2 pandemic, and to describe work-related and personal factors influencing their mental health and well-being.

Anxiety (prevalence ratio 1.37, 95 percent CI 1.09-1.73), depression (prevalence ratio 1.28, 95 percent CI 1.03-1.59), and high job tiredness (prevalence ratio 1.24, 95 percent CI 1.13-1.36) were all independently linked with COVID-19 exposure in the community or in the clinic. Supervisors' poor family-supportive behaviours were also linked to these outcomes (prevalence ratio 1.40, 95 percent CI 1.21-1.62; prevalence ratio 1.69, 95 percent CI 1.48-1.92; and prevalence ratio 1.54, 95 percent CI 1.44-1.64, respectively). These lower outcomes were also connected with being over 40 years old and having a greater number of family/home stressors[8].

Another research was conducted to study the Impact of COVID-19 Restrictions on Mental Well-Being and Working Life among Faroese Employees between April to June, 2020. Binary logistic regression analysis was used to examine the relationship between good or poor mental well-being and these predictors: perceived stress, job satisfaction, work ability, age, education, gender and children. Employees in health care rated their work abilities significantly higher than those in education and child and adolescent care (p 0.05). Working parents were more stressed and

rated their work competence significantly poorer than employees without children ($p < 0.05$), and women were more concerned than men about the pandemic[9].

Another event study based on high frequency panel data was conducted to analyse the effects of the COVID-19 Pandemic on the Mental Health and Subjective Well-Being of Workers by Schmidtke J, et.al. Using individual monthly panel data from December 2018 to December 2020, the estimate of the impact of the Covid-19 pandemic and two lockdowns on the mental health and subjective well-being of German workers.

The result was that the first and the second wave of the pandemic reduced workers' mental health substantially. Momentary happiness and life satisfaction also decline in response to Covid-19, but to a smaller extent[10].

A study on the perceived stress, work-related burnout, and working from home before and during covid-19 was conducted on workers in the United States. The study's objective was to determine the influence of involuntary remote working during the early stages of the COVID-19 epidemic on felt stress and job-related burnout in individuals with and without prior remote work experience. The authors created a questionnaire that was available from March 23rd through May 19th, 2020, and included the Perceived Stress Scale, the Copenhagen Burnout Inventory, demographic, and work-related questions.

It was observed that the pandemic limitations raised all participants' perceived stress, but age and gender showed substantial implications on stress and burnout. Burnout was most prevalent among respondents who had previously worked remotely prior to COVID-19. Communication, collaboration, and time management with coworkers via technology were the major issues cited. Working from home may increase perceived stress and work-related burnout, calling into doubt some businesses' efforts to make working from home a permanent option[11].

Another study on the impact of COVID-19 on mental health and quality of life was conducted by Ayesha S. Al Dhaheri ,et.al. to assess the effect of the pandemic on mental health and quality of life among the general population in the Middle East and North Africa (MENA) region. Because of COVID-19, the majority of participants (45–62%) felt appalled, apprehensive, or helpless. Furthermore, more than 40% expressed increasing stress from work and financial issues. Females, participants aged 26–35 years, those with a lower educational level, and those residing in the North Africa region all had higher IES-R scores ($p < 0.005$). Psychological impact was assessed using the Impact of Event Scale-Revised (IES-R) and the social and family support impact was assessed with questions from the Perceived Support Scale (PSS)[12].

METHODOLOGY

Study Design

A cross-sectional descriptive study of the sample of 229 was conducted using a strategically designed questionnaire to analyse the mental health impact of pandemic restrictions on the working-class population in India.

Study Population

The population of interest in this study is the working class of all age groups residing in India during the pandemic.

Inclusion Criteria

1. Working class population of all age groups.
2. People residing in India.

Exclusion Criteria

1. Non-working-class population.
2. People residing anywhere except India.

Sample Size:

A total sample of 227 participated in the study.

Sampling Method:

Non-Probability Sampling Method- Convenience sampling technique was used to take out the sample.

Study Tool:

A structured questionnaire was taken for the working-class population who were residing in India during the COVID-19 lockdown. The questionnaire was close ended for the target population.

Data Collection:

To reach the study's respondents, a self-administered survey was employed. By contacting organisations and associations, media pages on Facebook and LinkedIn, and sending e-mails to personal contacts, potential respondents were digitally invited to participate in the survey concerning the impact of COVID-19 pandemic on mental well-being and productivity of employees. The information about the study's goal and scope was included in the invitation message. Participation in the survey was not rewarded in any way. Those who agreed to take part in the study signed the consent form and were given the survey. Survey questions are provided in appendix 1.

Data Analysis

The analysis of mental well-being of the sample has been conducted under 7 parameters namely feeling low for more than 2 weeks, restlessness, suicidal thoughts, experienced changes in diet pattern, experienced changes in sleep pattern, mental health affected relationships with people around, spent most of the time concerned about their health, that were used in the survey tool and productivity of the sample has been analysed through 5 parameters used in the survey tool namely mental health affected ability to get work done, concentration on work affected, were unable to maintain work-life balance, felt reduction in productivity at work, never or occasionally energetic

The analysis is also conducted for mental well-being and productivity of the participants under the 7 and 5 parameters respectively, providing data of the distribution of the parameters

under four sociodemographic characteristics namely age, sex, marital status and years of professional experience which is presented in the table 1.

The age-groups of the participants have been divided into four categories that includes the age of 18 to 29 years, 30 to 39 years, 40 to 49 years and people in the age group of 50 years and above.

Gender has been divided into 3 categories that are male, female and others. Since the data attained for the Others category in the study was negligible (2 participants), therefore only the majority sample for gender is analysed in the study i.e. male and female.

The third category for analysis in the study is the marital status which has been divided into two categories i.e., married and unmarried (separated/widowed/single/divorced). The categories are so divided to understand the mental well-being implications of being married in comparison to others.

The fourth parameter of analysis in the study are the years of professional experience that include less than 1 years, 1-5 years, 5-10 years and more than 10 years.

RESULTS

Demographic Characteristics

A total sample of 227 participated in the study. The analysis of well-being and productivity of the sample has been conducted according to the four sociodemographic characteristics namely age, sex, marital status and years of professional experience which is presented in the table 1. The age-groups of the participants have been divided into four categories that includes the age of 18 to 29 years(51% of the participants), 30 to 39 years(23% of the participants), 40 to 49 years(10% of the participants) and people in the age group of 50 years and above(17% of the participants). Gender has been divided into 3 categories that are male and female. The third category for analysis in the study is the marital status which has been divided into two categories i.e., married and unmarried (separated/widowed/single/divorced). 49.8 % of the participants in the study are married while 50.2% are in the other category. The fourth parameter of analysis in the study are the years of professional experience that include less than 1 years (23.1% of the participants), 1-5 years (24.5% of the participants), 5-10 years (19.7%) and more than 10 years (32.8%).

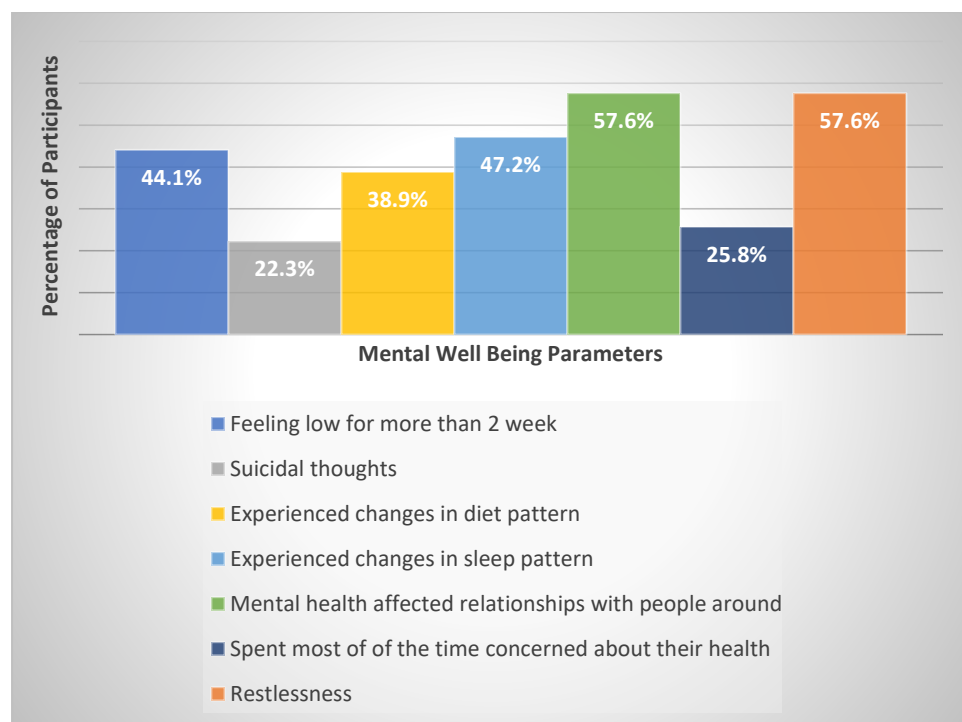
Age Group(in years)				
	15-24	25-34	35-44	45+
	51%	23%	10%	17%
Gender				
	Male		Female	
	55.0%		44.1%	
Marital status				
	Married		Unmarried/Separated/ Widowed	

	49.8%	50.2%		
Years of professional experience				
	Less than 1	1-5	5-10	More than 10
	23.1%	24.5%	19.7%	32.8%

(Table 1) Demographic characteristics

Mental Well-Being Parameters

There are 7 parameters included in this study to analyse the mental-well being of participants which are mentioned in the Fig 1.



(Fig 1: Shows graphical representation of mental well-being parameters of the participants)

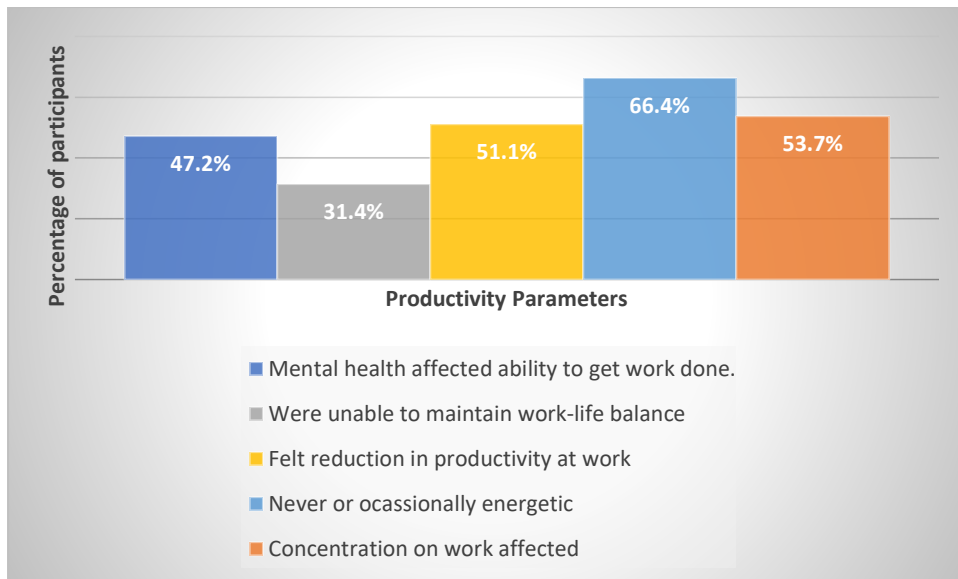
The mental well-being parameters of restlessness and the mental health affected relationship with people were experienced by majority of participants with a 57.6% and 57.6% of the total participants in both parameters.

22.3% of the participants had suicidal thoughts during the COVID-19 restrictions suggesting a major impact on the population. Feeling low for more than 2 weeks has been associated with depression and had a count of 44.1% of the study population.

A major proportion of the study has experienced changes in diet pattern (38.9%) and changes in sleep pattern (42.7%) which are associated with COVID-19 lockdown restrictions.

Productivity Parameters

There are 5 parameters included in this study to analyse the work productivity of participants which are mentioned in the Fig 2.



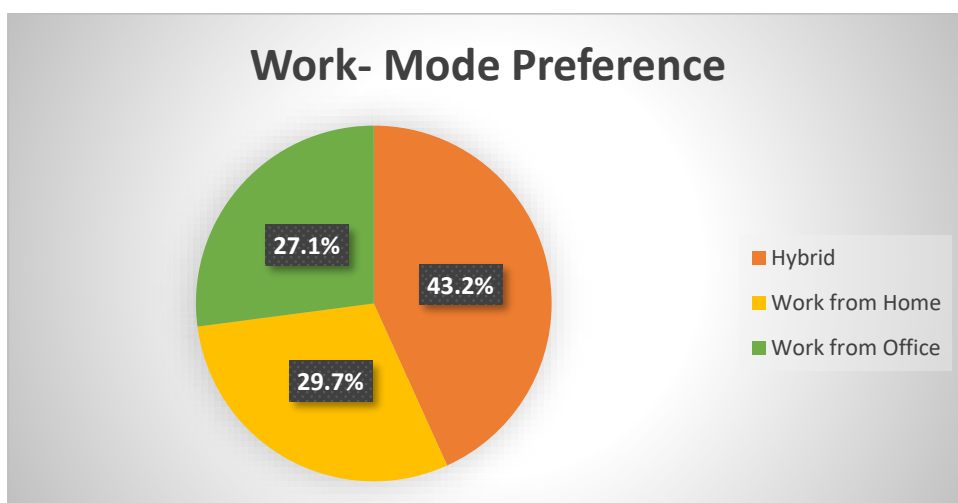
(Fig 2: Shows graphical representation of productivity parameters of the participants)

The data provides with a high percentage of participants (66.4%) who were never or occasionally energetic. The lowest percentage (31.4%) covers the participants who were unable to maintain work-life balance.

More than half the participants felt reduction in productivity at work (51.1%) and their concentration on work was affected by the restrictions of COVID-19 (53.7%). It is also observed that 47.2% of the participants' mental health affected ability to get work done.

Three (felt reduction in productivity at work, never or occasionally energetic, concentration on work affected) out of the five parameters for productivity in the data are experienced by more than 50% of the participants suggesting that more than half the participants experienced an impact on their productivity levels.

Work-mode Preference



(Fig 3)

The participants in the study have highest (43.2%) preference of hybrid mode of work (a combination of both work from home and work from office)

1. Mental Well-being Parameters- demographic distribution

1.1 Gender distribution

The seven parameters used to study mental well-being of employees distributed according to gender are given in the table 1.1.

	Female	Male	Total
Feeling low for more than 2 weeks	59	42	101
Restlessness	65	66	131
Suicidal thoughts	23	27	50
Experienced changes in diet pattern	43	46	89
Experienced changes in sleep pattern	50	56	106
Mental health affected relationships with people around	68	62	130
Spent most of the time concerned about their health	30	28	58

(Table 1.1) Gender distribution of no. of participants with impacted mental well-being

Signs of feeling low for more than 2 weeks is observed to be more in females i.e. 58.42% of the participants impacted by the parameter. A substantial difference in this parameter is observed between the genders.

Signs of restlessness were seen to be in close numbers in both the genders which is 65 for males and 66 for females.

The numbers in the data for signs of suicidal thoughts in both genders indicates an alarming number of participants with suicidal thoughts during the COVID-19 associated restrictions with lower numbers seen females (23 out of the total participants experiencing the sign i.e. 50)

An increase or decrease in duration of sleep along with disturbed sleep was experienced by participants and was observed to be in close figures in both the genders. Changes in diet pattern was observed to be in close figures in both the genders (43 male participants and 46 female participants)

1.2 Age Groups distribution

The seven parameters used to study mental well-being of employees are given in the table 1.2.

(Table 1.2) Age-wise distribution of no. of participants with impacted mental well-being

Age (in years)	18-29	30-39	40-49	50+	Total
Feeling low for more than 2 weeks	61	22	8	10	101
Restlessness	77	30	11	14	132
Suicidal thoughts	32	8	6	5	51
Experienced changes in diet pattern	53	18	9	9	89
Experienced changes in sleep pattern	57	29	11	11	108
Mental health affected relationships with people around	72	30	14	16	132
Spent most of the time concerned about their health	34	14	4	7	59

A total of 61 participants in the age of 18-29 years out of 101 total participants that experienced signs of feeling low for more than 2 weeks which is highest amongst all age groups i.e. 60.4%.

Signs of restlessness were seen to be higher in the age-group of 18-29 and lowest in the age group of 40-49 years i.e., 8.3% of the participants affected.

The numbers in the data for signs of suicidal thoughts in each age-group indicates an alarming number of participants with suicidal thoughts during the COVID-19 associated restrictions with lowest numbers seen in the 50 years and above category i.e., 5 participants out of 51.

An increase or decrease in duration of sleep along with disturbed sleep was experienced by participants and was observed to be highest in the 18-29 years group i.e. 57 out of 108 participants affected.

Changes in diet pattern including no hunger and excessive eating was observed to be distributed invariably between different age groups.

Mental health affected relationship with people was seen to be highest in all age-groups in comparison with the other six parameters. The age group of 40-49 years have spent least time being concerned about their health i.e., 4 participants out of 59.

1.3 Marital Status Distribution

The seven parameters used to study mental well-being of employees according to marital status are given in the table 1.3.

	Married	Unmarried/Separated/ Widowed/Divorced (Others)
Feeling low for more than 2 weeks	43	58
Restlessness	57	75
Suicidal thoughts	18	33
Experienced changes in diet pattern	35	54
Experienced changes in sleep pattern	49	59
Mental health affected relationships with people around	59	73
Spent most of the time concerned about their health	30	29

(Table 1.3) Marital status distribution of no. of participants with impacted mental well-being

Signs of feeling low for more than 2 weeks is observed to be more in others category i.e. 58 participants experienced the sign. Signs of restlessness were also seen to be in higher numbers in the others category i.e., 75 which is a substantial difference observed from the married category of 57 participants.

The numbers in the data for signs of suicidal thoughts are seen to be in higher numbers in both the categories but a difference of in numbers is observed which is higher in the others category i.e. 33 participants.

Mental health affected relationship with people was seen to be highest in both categories in comparison with the other six parameters and not much difference is seen in the parameter of spending most of the time concerned about their health but is higher in married participants which are 30 in comparison to the other group.

1.4 Years of Professional Experience

The seven parameters used to study mental well-being of employees according to years of professional experience are given in the table 1.4.

	1-5	5-10	Less than 1	More than 10	Total
Feeling low for more than 2 weeks	28	26	30	17	101
Restlessness	36	33	38	25	132
Suicidal thoughts	14	14	13	10	51
Experienced changes in diet pattern	25	16	28	20	89
Experienced changes in sleep pattern	29	33	21	25	108
Mental health affected relationships with people around	36	32	30	34	132
Spent most of the time concerned about their health	20	12	12	15	59

(Table 1.4) Years of professional experience of no. of participants with impacted mental well-being

The data on signs of feeling low for more than 2 weeks was observed to be highest (29.7% of participants exhibiting the signs) in the participants having a professional experience of less than 1 year. Restlessness in participants was also observed to be highest (28.8% of participants exhibiting the signs of restlessness) in the participants having a professional experience of less than 1 year.

The data on suicidal thoughts is more or less in close figures in all the categories. Changes in diet pattern are seen to be lowest(18.0% of participants with change in diet pattern) in the participants having a professional experience of 5-10 years.

Participants having a professional experience of 1-5 years are observed to have highest (33.9% of the participants exhibiting the signs) time spent concerned about their health.

2. Productivity Parameters- Demographic Distribution

2.1 Gender distribution

The 5 parameters used to study mental well-being of employees according to gender are given in the table 2.1.

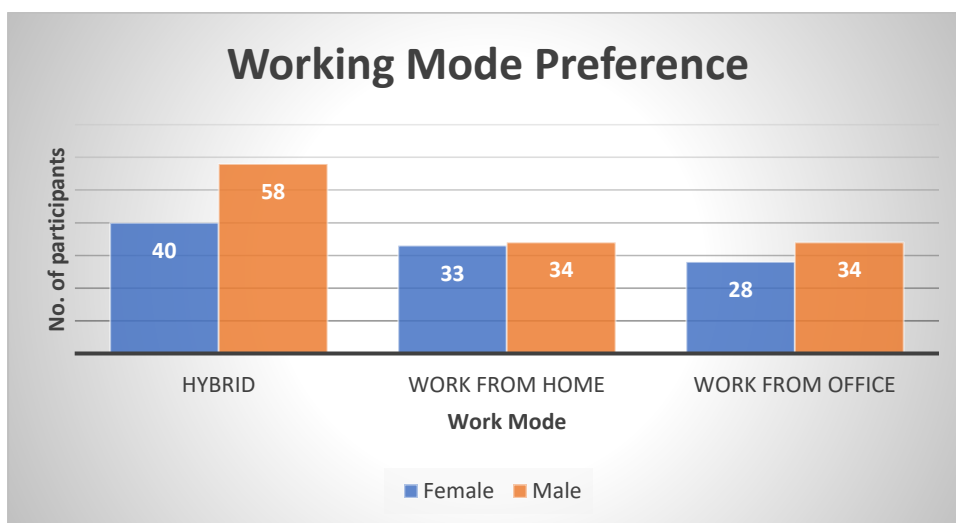
	Female	Male	Total
Mental health affected ability to get work done.	58	50	108
Concentration on work affected	63	59	122
Were unable to maintain work-life balance	35	36	71
Felt reduction in productivity at work	52	64	116
Never or occasionally energetic	74	77	151

(Table 2.1) Gender distribution of no. of participants with impacted mental productivity

Female participants in the study are observed to exhibit more (53.7% of the participants affected) signs of mental health affecting their ability to get work done. Female participants' concentration on work are also more (51.7% of the participants affected) affected according to the data.

More (64 participants out of 116 participants) number of male participants felt reduction in productivity at work. No substantial difference (74 female participants and 77 male participants) is seen in feeling of being energetic in both the genders.

2.1.1 Work-mode preference



(Fig 2.1.1)

The preference of work mode as hybrid mode is observed to be more than the other two modes by both the genders. Higher number (58 males in comparison to 40 females) of males in comparison to females prefer hybrid mode.

2.2 Marital Status Distribution

The 5 parameters used to study mental well-being of employees according to marital status are given in the table 2.2

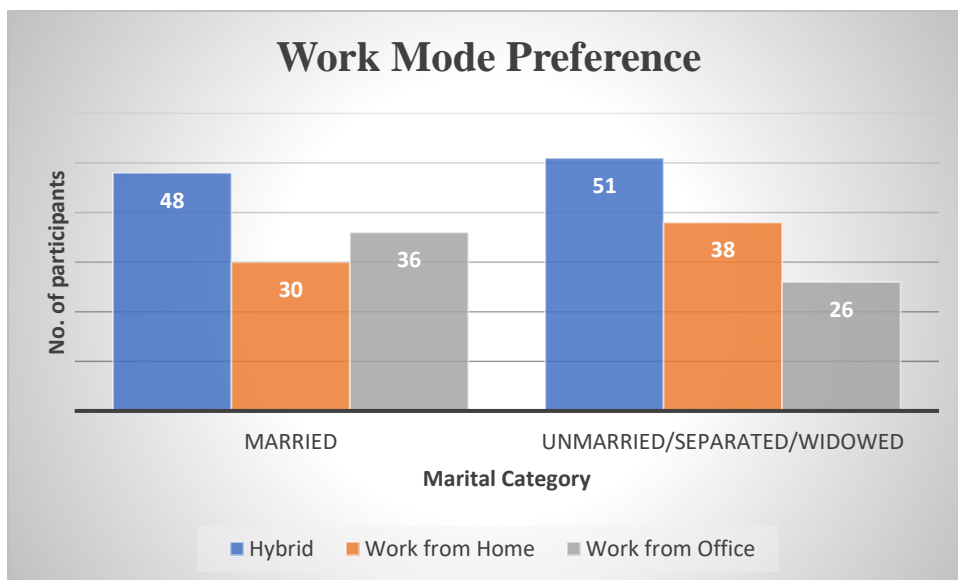
	Married	Unmarried/Separated/Widowed (others)	Total
Mental health affected ability to get work done.	49	59	108
Concentration on work affected	55	68	123
Were unable to maintain work-life balance	24	48	72
Felt reduction in productivity at work	57	60	117
Never or occasionally energetic	61	91	152

(Table 2.2) Marital Status distribution of no. of participants with impacted productivity

According to the data provided, 36.0%(59 participants) of participants(others category) of the total 164 participants, are observed to have higher percentage in getting mental health affecting ability to get work done.

Similarly, in all the productivity parameters, a higher percentage of the participants exhibiting parameters of low productivity are observed to be from the others category.

2.2.2 Work-mode preference



(Fig 2.2.2)

The preference of work mode as hybrid is observed to be more than the other two modes by both the marital categories. Preference of hybrid mode is more or less in close figures (48 participants for married and 51 participants for others category).

2.3 Years of professional experience

The 5 parameters used to study mental well-being of employees according to years of professional experience are given in the table 2.3

	1-5	5-10	Less than 1	More than 10	Total
Mental health affected ability to get work done.	29	27	32	20	108
Concentration on work affected	30	30	34	29	123
Were unable to maintain work-life balance	19	20	22	11	72
Felt reduction in productivity at work	36	29	23	29	117
Never or occasionally energetic	45	30	43	34	152

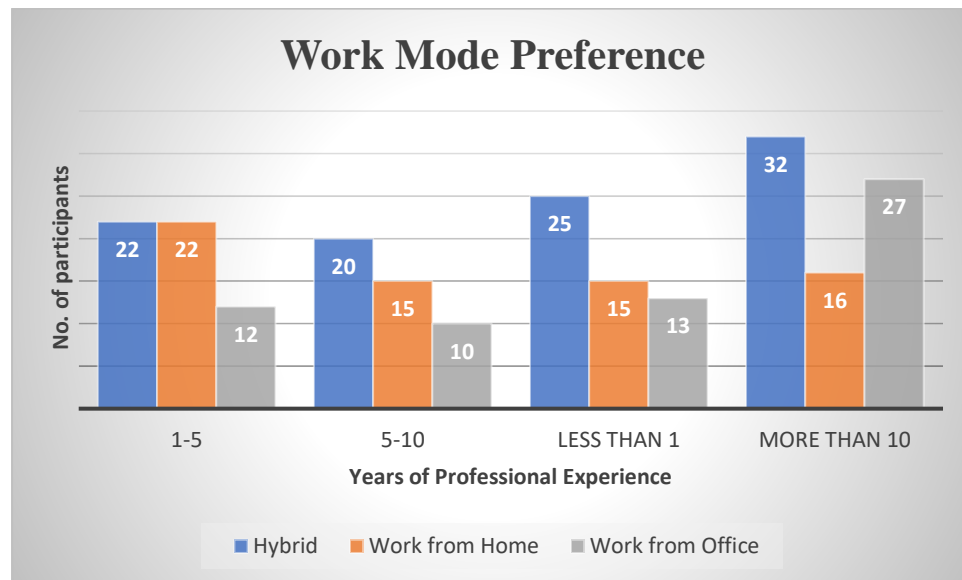
(Table 2.3) Years of professional experience of no. of participants with impacted productivity

The data on mental health affecting ability to get work done was seen to be highest (29.6% of total affected) in participants having a professional experience of less than one year. The participants having a professional experience of less than one year also had more concentration in work affected during the restrictions (27.6% of the participants affected).

According to the productivity parameter of maintaining work life balance, it is seen that minimum number of participants i.e. 11 were having more than 10 years of professional experience while the maximum number of participants who faced trouble maintaining the work-life balance were having a professional experience of less than 1 year.

The highest number of participants (45 of the 152 affected- 29.6%) who were never or occasionally energetic were observed to be having a professional experience between 1 to 5 years.

2.3.3 Work-mode preference



(Fig 2.3.3)

The preference of work mode as hybrid is observed to be more than the other two modes by all the categories of participants with all number of years of professional experience in the study as mentioned in the Fig 2.3.3 except for participants having professional experience of

1-5 years suggesting a preference of both the hybrid mode (22 participants) and work from home mode (22 participants).

DISCUSSION

The research was conducted with an objective to study the impact of COVID-19 associated restrictions on the mental-well-being and productivity of 229 working class participants. An extensive questionnaire was prepared and 7 parameters for studying the impact of the restrictions on mental well-being of working-class population were used in the study and 5 parameters were identified for studying the work productivity of the participants. The distribution of data on the basis of gender, age, marital status and years of professional experience has been analysed to understand the impact on the working-class population.

The result of the survey indicate that the COVID-19 restrictions have a negative impact on the mental-well-being of the working population in India according to the parameters used for analysing the mental well-being of the participants which depict that high percentage of the participants are affected by those parameters. These results are consistent with a study conducted in Faroe Islands. The calculated impact on mental well-being of Faroe employees is 21.9%. [13]

Preference of work mode as hybrid has been observed by majority (43.2%) of the participants according to the overall data of the study. It has also been observed that the hybrid mode preference is highest in all gender distribution, age distribution, marital status distribution and years of employment distribution. These results are consistent with a study conducted on the impact of working from home on productivity during COVID-19 in Sweden. According to the study, 73.9% of the participants feel that the hybrid mode is more effective for their work productivity [14].

A high percentage (57.6%) of the participants are observed to have experienced restlessness during the lockdown. A study conducted in Spain and Italy also depicted that 38.8% of the participants were restless during the lockdown [15]. Restlessness is most commonly associated with anxiety and depression, the clinical manifestation of which might lead to reduction in work productivity.

An alarming 22.3% of the study participants perceived suicidal thoughts during the COVID-19 restrictions. Suicidal thoughts were seen more in males (27 participants out of the 50 affected) than in females (23 participants out of 50 affected). Suicidal thoughts can occur when a person feels that they are no longer able to cope with an overwhelming situation. During the restrictions of COVID-19, there has been loss of life, rapid changes in our way of life and disrupted plans due to travel restrictions that might lead to overwhelming situations.

Changes in diet (38.9% of participants) and sleep pattern (47.2% of participants) were also observed during restrictions of COVID-19. These changes in diet may include excessive eating, no hunger or intaking carbohydrates and sugars to cope up with the overwhelming situation. The changes in sleep pattern includes substantial increase or decrease in sleep duration, disturbed sleep or no sleep at all.

It is to be observed that 57.6% of the participants experienced relationship straining with people around due to the situation of restrictions impacting the mental well-being of working-class population. Another study conducted on employees also depicted a 70.7% strain in

relationships [16]. This depicts that the social health of the participants is affected, leading to a strain in mental well-being.

The result of the survey also indicate that the COVID-19 restrictions have a negative impact on the mental productivity of the working population in India according to the parameters used for analysing the productivity of the participants which depict that high percentage of the participants are affected by those parameters.

A very noticeable 66.4% of participants in the study were never or occasionally energetic during the restrictions. These changes in energy levels of employees may be due to the sedentary habits produced as a result of staying at home and restrictions of travelling and going outside. This high percentage may also suggest a negative impact on the productivity of employees who were working from office before the pandemic.

51.1% of the participants in the study perceived reduction in their productivity at work. A similar result was observed by employees of Deloitte, UK, having a perceived reduction in their work productivity of 55.5% [17]. It is also seen in the study that the participants having a professional experience of 1-5 years perceived maximum (36 out of the 117 participants affected) reduction in productivity at work.

31.4% of the study participants were unable to maintain work-life balance during the restrictions. This parameter directly corresponds to reduced productivity at work. It may also be noticed from the study that more participants having a professional experience of more than 10 years, were able to maintain a work-life balance in comparison to participants having experience of less than 10 years. Similarly, according to the data, married people were better (24 out of 72 affected) in maintaining work-life balance in comparison to unmarried/separated/divorced (48 out of 72 affected).

According to the survey results, it is observed that there were more number (59 out of the total 101 affected by the parameter) of females during the COVID-19 restrictions who experienced feeling low for more than 2 weeks in comparisons to males (42 out of the total 101 affected by the parameter) while males perceived changes in their sleep (56 participants out of 106 affected) and diet pattern (46 out of 89 affected).

RECOMMENDATIONS

- The data provided in the study shows impact on mental well-being of working population that suggests a need of expanding the mental health services to organizations for employees working there.
- There is a need to raise awareness of psychological issues during pandemics through multiple media platforms, as well as the need of seeking help and engaging in physical exercise for the management of mental health disorders.
- It is critical to raise health-care practitioners' understanding of the importance of identifying and targeting high-risk groups of the population who are at risk of acquiring mental health problems.
- Organizations may develop strategies and conduct surveys on employs on a regular basis to improve the working conditions and work environment.
- Low-income families and those who have lost their employment require moral and financial support from governments and authorities.

- In addition, to decrease the strain on individuals during the present pandemic, working hours must be regulated.
- Future large-scale comparable studies among working population will help public health authorities shape their reactions and interventions in the future in response to similar crises.
- There should be allowance of flexibility in work, such as letting the employees arrange their work schedule and offering hybrid work both during and after the pandemic.
- Telehealth and internet-based Cognitive Behaviour Therapy (CBT) programmes, which have been demonstrated to be successful in preventing and treating common mental disorders can be brought to practice in organizations.
- Organizations could establish opportunities for engagement with colleagues and the sharing of ideas, as well as a supportive team environment.

LIMITATIONS

The limitation of the study is that the proposed sample size could not be completed due to limited span of time and chosen particular inclusion criteria for the population.

CONCLUSION

The COVID-19 pandemic seems to be having a significant impact on how people are working now and in the future. After the pandemic, it is unlikely that people will return to their old ways of functioning at the office. Working from home and combining the two is projected to become more popular. Since the advent of the pandemic, many firms and their personnel have been working throughout the world to adjust to the new circumstances and be as productive as possible. Because it is a new field, little is known about the elements that influence productivity when working from home.

This study provides an insight into the elements that may impact mental well-being and productivity of employees. The findings of the survey emphasise the necessity of addressing mental health and the work environment in a pandemic like COVID-19, which might have far-reaching consequences on daily lives of working population. The study depicts the parameters of the impact of COVID-19 associated restrictions on the working population that suggest a high percentage of the participants are negatively impacted by the restrictions, thus creating a need for workplace evaluation of mental well-being and creating measures in workplace to prevent such implications to mental health.

REFERENCES

1. World Health Organization. World Health Organization Director-General's statement on IHR Emergency Committee on Novel Coronavirus (2019-nCoV). 2020. [https://www.who.int/dg/speeches/detail/who-director-general-s-statement-on-ihr-emergency-committee-on-novel-coronavirus-\(2019-ncov\)](https://www.who.int/dg/speeches/detail/who-director-general-s-statement-on-ihr-emergency-committee-on-novel-coronavirus-(2019-ncov)). Accessed 20 May 2022.
2. Gettleman, Jeffrey; Schultz, Kai (24 March 2020). "[Modi Orders 3-Week Total Lockdown for All 1.3 Billion Indians](#)". *The New York Times*. [ISSN 0362-4331](#)
3. Kniffin KM, Narayanan J, Anseel F, Antonakis J, Ashford SP, Bakker AB, et al. COVID-19 and the workplace: Implications, issues, and insights for future research and action. *Am Psychol*. 2021;76(1):63–77.
4. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*. 2020;395(10227):912–20.
5. Rodríguez-Rey R, Garrido-Hernansaiz H, Collado S. Psychological impact and associated factors during the initial stage of the coronavirus (COVID-19) pandemic among the general population in Spain. *Front Psychol*. 2020;11:1–23.
6. Wang J., Lloyd-Evans B., Giacco D., Forsyth R., Nebo C., Mann F., Johnson S. Social isolation in mental health: A conceptual and methodological review. *Soc. Psychiatry Psychiatr. Epidemiol*. 2017;**52**:1451–1461. doi: 10.1007/s00127-017-1446-1.
7. Panchal N, Kamal R, Cox C, Garfield R. The implications of COVID-19 for mental health and substance use. *KFF*. 2021 [cited 2022 Jun 7].
8. Evanoff BA, Strickland JR, Dale AM, Hayibor L, Page E, Duncan JG, et al. Work-related and personal factors associated with mental well-being during the COVID-19 response: Survey of health care and other workers. *J Med Internet Res*. 2020 [cited 2022 Jun 7];22(8):e21366.
9. Davidsen AH, Petersen MS. The impact of COVID-19 restrictions on mental well-being and working life among Faroese employees. *Int J Environ Res Public Health*. 2021 [cited 2022 Jun 7];18(9):4775.
10. Schmidtke J, Hetschko C, Schöb R, Stephan G, Eid M, Lawes M. The effects of the COVID-19 pandemic on the mental health and subjective well-being of workers: An event study based on high-frequency panel data. *SSRN Electron J*. 2021;
11. Zhang W, Velez D. Effects of COVID-19 on physical activity and its relationship with mental health in a US community sample: Cross-sectional, convenience sampling-based online survey. *JMIR Form Res*. 2022 [cited 2022 Jun 7];6(4):e32387.
12. Al Dhaheer AS, Bataineh MF, Mohamad MN, Ajab A, Al Marzouqi A, Jarrar AH, et al. Impact of COVID-19 on mental health and quality of life: Is there any effect? A cross-sectional study of the MENA region. *PLoS One*. 2021;16(3):e0249107.
13. Davidsen AH, Petersen MS. The impact of COVID-19 restrictions on mental well-being and working life among Faroese employees. *Int J Environ Res Public Health*. 2021 [cited 2022 Jun 19];18(9):4775.
14. Alaqra AS. The impact of Working from Home on productivity during COVID-19. *Diva-portal.org*. [cited 2022 Jun 19].
15. Orgilés M, Morales A, Delvecchio E, Mazzeschi C, Espada JP. Immediate psychological effects of the COVID-19 quarantine in youth from Italy and Spain. *Front Psychol*. 2020;11:579038.

16. Davidsen AH, Petersen MS. The impact of COVID-19 restrictions on mental well-being and working life among Faroese employees. *Int J Environ Res Public Health*. 2021 [cited 2022 Jun 19];18(9):4775.
17. Working during lockdown: The impact of COVID-19 on productivity and wellbeing. *Deloitte United Kingdom*. 2020 [cited 2022 Jun 19].

Annexure -1

FORM- SURVEY TOOL

Title: Study to understand the effects of covid-19 associated restrictions on Mental well-being and productivity of working population in India

Section 1

Employment History

1. During the pandemic outbreak, were you employed?
 - Yes
 - No

Section 2

COVID-19 History

2. Have you been COVID-19 infected at least once since its outbreak?
 - Yes
 - No

Section 3

General Information

3. Name
4. Age(in years)
 - 15-30
 - 30-40
 - 40-50
 - More than 50
5. Gender
 - Male
 - Female
 - Others
6. Marital Status
 - Single
 - Married
 - Divorced
 - Widowed
 - Separated

7. Type of Employment
 - Self- Employed
 - Service
8. Years of professional Experience?
 - Less than 1
 - 1-5
 - 5-10
 - More than 10
9. Have you been diagnosed with a mental disorder before?
 - Yes
 - No

Section 4

During the period of lockdown, have you experienced the following?

10. Your mental health affected your ability to get work done.
 - Very Often
 - Occasionally
 - Rarely
 - No difference
11. Felt particularly low or down for more than 2 weeks in a row.
 - Very Often
 - Occasionally
 - Rarely
 - No difference
12. Had suicidal thoughts during the lockdown.
 - Yes
 - No
 - Maybe
13. Noticed any change in your diet.
 - Yes, I ate too much
 - Yes, I did not feel hungry
 - Slight change
 - No change
14. Changes in sleep patterns.
 - Sleep time slightly decreased
 - Sleep time substantially decrease
 - Sleep time slightly increased

- Sleep time substantially increased
- Disturbed sleep
- No sleep at all

15. Being so restless it's hard to sit still.

- Several Days
- More than half a day
- Nearly Every day
- Not at all

16. Increased feeling of being easily annoyed or irritated.

- Several Days
- More than half a day
- Nearly every day
- Not at all

17. Your concentration on work affected

- Very Often
- Occasionally
- Rarely
- No difference

18. Your mental health affected your relationships with people around you.

- Yes
- No
- Not sure

Section 5

Assessment of COVID-19 lockdown experience

19. Were you able to maintain work-life balance during the lockdown.

- Slightly
- Moderately
- To a large extent
- No

20. Which of the following statements best describes your feelings during the lockdown?

- I do not worry about my health
- I occasionally worry about my health
- I spend much of my time worrying about my health
- I spend most of my time worrying about my health

21. Was your productivity in work affected during the lockdown period?

- Slightly
- Moderately
- To a large extent
- No difference

22. Do you Smoke?

- Yes
- No

23. Did your frequency of smoking increase during Covid-19 lockdown.

- Yes
- No

24. How often were you calm and peaceful during lockdown?

- Never
- Occasionally
- Often
- Always

25. How often were you energetic?

- Never
- Occasionally
- Always

26. Which of the following do you prefer?

- Work from Home
- Work from Office
- Hybrid

Annexure – 2

PLAGIARISM REPORT



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