Covid 19 Pandemic Lockdown And Job Stress Among The Technical And Management Graduates

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The COVID-19 pandemic has universally impacted stress levels, with significant repercussions on job security and mental health. This research focuses on managerial and technical graduates, assessing changes in their stress levels post-pandemic. The lockdown measures, alongside the virus's fatality, induced widespread fear, anxiety, and job insecurity. While some frontline workers continued their roles, many employees faced joblessness, exacerbating stress. This empirical research, involving 406 respondents (320 managerial and 86 technical graduates), explores differences in stress levels between COVID-19 affected and non-affected individuals. Data was collected through interviews conducted immediately after the lockdown. Statistical methods, including percentage analysis and chi-square tests, were used to draw inferences. The findings aim to contribute to the limited studies on the job stress of engineering and management graduates during the pandemic, providing insights into their unique stress experiences in the post-COVID-19 era.

Keywords: COVID-19, Job Stress, Managerial Graduates, Technical Graduates, Post-Pandemic.

Introduction

Stress is an integral aspect of human life, recognized as a universal phenomenon. In contemporary times, no individual or organization can claim immunity from stress. Stress manifests in everyone at various stages of life. Although numerous studies have identified various stressors, diseases are notably significant due to their profound psychological impacts. When individuals are afflicted by diseases, they typically experience heightened anxiety and insecurity, leading to severe mental stress. The Novel-Corona virus (COVID-19), with its rapid transmission and severe impact on vital organs, particularly the lungs, is among the most fatal viruses in recent history. [1]

Beyond the virus's lethality, government measures to curb its spread, such as lockdowns, strict quarantines, movement restrictions, and limited knowledge about transmission pathways, have instilled pervasive fear and anxiety—key contributors to stress. Moreover, the lockdown resulted in widespread joblessness. Daily wage earners faced desperation and loss of livelihood, while employers struggled to support employees despite halted production and

business activities. This led to a pervasive sense of insecurity among both employees and employers [2].

While the majority of employees and employers experienced significant stress, a small segment of frontline workers in health, sanitation, hospitality, and other essential services continued working during the pandemic, often at great personal risk. Additionally, workers supplying groceries, food items, and other essentials maintained their duties. Despite extensive research during the pandemic, there is a notable gap in studies focusing exclusively on the job stress of engineering and management graduates who worked during this period, particularly in certain regions. Hence, this study aims to address this gap [3].

In the realm of research methodology, innovation is pivotal for advancing scholarly inquiry and generating meaningful insights. In this study, we introduce a novel algorithmic approach that integrates cutting-edge techniques to enhance the rigor and depth of our investigation into stress dynamics among managerial and technical graduates amidst the COVID-19 pandemic [4].

The novel algorithm represents a departure from conventional research methodologies by synthesizing traditional empirical methods with advanced statistical procedures. By harnessing the power of algorithmic principles, this approach offers a systematic and efficient framework for data collection, analysis, and interpretation. The algorithmic framework provides a structured pathway for researchers to navigate the complexities of the research process, ensuring methodological coherence and consistency throughout [5].

At its core, the novel algorithm is designed to optimize every stage of the research process, from data collection to interpretation of findings. By leveraging algorithmic principles, researchers can streamline data collection protocols, enhance data analysis capabilities, and derive deeper insights from complex datasets. This innovative approach empowers researchers to uncover hidden patterns, associations, and trends that may elude traditional analytical methods [6].

The foundation of any empirical study lies in the quality and integrity of the data collected. In this study, we employed a rigorous data collection protocol to ensure the robustness and validity of our findings. The data collection process commenced with the identification of graduate employees who were actively engaged during the COVID-19 pandemic [7].

To ensure a representative sample, we employed a purposive sampling strategy, targeting individuals from both COVID-19 affected and non-affected cohorts. This approach allowed us to capture a diverse range of experiences and perspectives, enriching the depth and breadth of our dataset. Prior to inclusion in the study, all participants provided informed consent, in accordance with ethical guidelines and standards [8].

The sample size comprised 406 respondents, consisting of 320 managerial and 86 technically qualified graduates. This diverse cohort represented a cross-section of professionals with

varying levels of experience and expertise in managerial and technical domains. By encompassing a broad spectrum of participants, we aimed to capture the full spectrum of stress dynamics within this professional context [9].

Once the sample was identified, an interview schedule was meticulously crafted to elicit comprehensive responses from participants. The interview schedule was designed to address various aspects of the COVID-19 pandemic, including its impact on professional roles, psychological well-being, coping mechanisms, and perceived stress levels. Each question was carefully formulated to facilitate in-depth exploration of participants' experiences and perspectives [10].

With the data collection protocol in place, researchers commenced the interview process, adhering to rigorous standards to maintain data integrity and validity. Each participant's responses were recorded systematically, ensuring accuracy and completeness of the dataset. Throughout the data collection phase, the novel algorithm guided researchers in navigating the complexities of the research process, optimizing efficiency and effectiveness at every step.

The COVID-19 pandemic has precipitated a global crisis, extending far beyond its immediate health implications to encompass profound social, economic, and psychological ramifications. Researchers worldwide have undertaken investigations to elucidate the multifaceted impact of the pandemic on various population groups, with a particular focus on stress levels and mental health outcomes. This literature survey delves into ten seminal studies that have contributed to our understanding of the psychological impact of the COVID-19 pandemic on different cohorts, shedding light on the prevalence of stress, anxiety, and depression during these unprecedented times.

Related Works

Et. Al [11] conducted a study on the impact of the COVID-19 pandemic on stress levels among university students, revealing its significant repercussions on mental health and well-being. The study underscored the pervasive nature of stress among this demographic, highlighting the need for targeted interventions to support students' psychological resilience amidst the challenges posed by the pandemic.

In a research endeavour by Et. Al [12], the psychological impact of the COVID-19 pandemic on healthcare workers was assessed, unveiling heightened levels of stress and anxiety among this critical population. The study underscored the unique stressors faced by healthcare professionals on the frontline, emphasizing the urgent need for comprehensive support mechanisms to safeguard their mental well-being.

Et. Al [13] delved into the relationship between COVID-19 experiences and mental health outcomes among Saudis, shedding light on the prevalence of depression, anxiety, and stress during the pandemic. The study highlighted the profound psychological toll of the pandemic

on individuals, emphasizing the importance of addressing mental health needs as an integral component of pandemic response efforts.

A study by Et. Al [14] examined the psychological status of COVID-19 patients in isolation wards, offering insights into the stress levels and coping mechanisms of individuals directly affected by the virus. The research underscored the psychological impact of isolation and quarantine measures, highlighting the importance of holistic care approaches to support patients' mental well-being.

The impact of the COVID-19 pandemic on the mental health of university students in Sri Lanka was investigated by Et. Al [15], elucidating the significant challenges faced by this demographic. The study underscored the need for targeted interventions to address students' mental health needs and mitigate the adverse effects of the pandemic on their well-being.

Et. Al [16] assessed the physical and psychological impact of the COVID-19 pandemic on healthcare workers at a Portuguese hospital, emphasizing the need for targeted interventions to support this vulnerable population. The research highlighted the critical role of healthcare professionals in pandemic response efforts and underscored the importance of prioritizing their mental well-being.

In a study by Et. Al [17], the impact of the COVID-19 pandemic on the mental health and well-being of Slovenian nurses was investigated, highlighting the unique stressors faced by frontline healthcare workers. The research underscored the importance of implementing comprehensive support measures to address the mental health needs of nurses amidst the challenges posed by the pandemic.

The association between COVID-19 experiences, physical activity, and well-being was explored by Et. al[18], highlighting the potential role of exercise in mitigating stress and promoting mental health during the pandemic. The study underscored the importance of holistic approaches to well-being that encompass physical activity as a key component of mental health maintenance during times of crisis.

Et. al [19] conducted a sentiment analysis of Arabic COVID-19 tweets, assessing disease sentiment, information accuracy, and its correlation with infection rates, providing insights into public perceptions and responses to the pandemic. The research shed light on the role of social media in shaping public discourse and attitudes towards the pandemic, highlighting the importance of accurate and timely information dissemination.

A study by Et. Al [20] provided an early overview of the Jordanian experience in battling COVID-19, offering valuable insights into the country's response efforts and their impact on public health and well-being. The research underscored the importance of proactive measures and collaborative approaches in mitigating the spread of the virus and protecting population health amidst the challenges posed by the pandemic.

In summary, the ten studies highlighted in this literature survey offer valuable insights into the psychological impact of the COVID-19 pandemic on various population groups, including university students, healthcare workers, and the general public. By elucidating the prevalence of stress, anxiety, and depression during these unprecedented times, these studies underscore the urgent need for comprehensive support mechanisms to safeguard mental well-being amidst the challenges posed by the pandemic. Moving forward, further research is warranted to explore innovative interventions and strategies aimed at addressing the unique mental health needs arising from the ongoing global crisis.

Objective

The primary aim of this study is to conduct a comprehensive assessment of the fluctuations in stress levels experienced by managerial and technical graduates who were impacted by the COVID-19 pandemic during the post-COVID-19 period. By focusing on individuals within these professional domains, the study seeks to elucidate the nuanced responses to stress in a context shaped by the pandemic's aftermath. Through a meticulous examination of stress levels, the research endeavors to identify any discernible patterns, disparities, or shifts that may have occurred as a result of the pandemic's influence. By elucidating these variations, the study aims to contribute valuable insights into the psychological impact of COVID-19 on individuals with managerial and technical backgrounds, thereby facilitating the development of targeted interventions and support mechanisms to mitigate stress-related challenges in the post-pandemic era.

Scope

This study targets managerial and technical graduates holding advanced degrees like BE and ME in engineering fields, as well as individuals with dual engineering and managerial expertise. Its objective is to scrutinize alterations in perceived stress levels within the post-COVID-19 landscape. By specifically concentrating on this cohort, encompassing a blend of engineering and managerial disciplines, the research endeavours to offer insights into how stress dynamics have evolved in response to the pandemic's aftermath, thereby contributing to a nuanced understanding of stress experiences in this professional context.

Research Methodology

In this research endeavour, we adopt a novel algorithmic approach to the methodology, integrating cutting-edge techniques to ensure robust data collection, analysis, and interpretation. This algorithm synthesizes traditional empirical methods with advanced statistical procedures to yield comprehensive insights into stress dynamics among managerial and technical graduates amidst the COVID-19 pandemic.

Data Collection Protocol

The data collection process commenced by targeting graduate employees who were actively engaged during the COVID-19 pandemic. A purposive sampling strategy was employed to ensure representation from both COVID-19 affected and non-affected cohorts. Following ethical guidelines, informed consent was obtained from all participants prior to their inclusion in the research. The sample size consisted of 406 respondents, comprising 320 managerial and 86 technically qualified graduates.

Interview Schedule Preparation

An interview schedule was meticulously crafted to capture multifaceted dimensions of the COVID-19 experience, tailored specifically to the context of managerial and technical graduates. This schedule incorporated a diverse range of questions addressing various aspects of the pandemic, including its impact on professional roles, psychological well-being, coping mechanisms, and perceived stress levels. The questions were designed to elicit comprehensive responses that would facilitate a nuanced understanding of participants' experiences.

Upon completion of the interview schedule, data collection commenced, adhering to rigorous standards to maintain data integrity and validity. Each participant's responses were recorded systematically, ensuring accuracy and completeness of the dataset. The novel algorithm guided the data collection process, emphasizing meticulous attention to detail and adherence to established protocols.

Interpretation of Findings

The insights gleaned from the data analysis phase were subjected to thorough interpretation, guided by the overarching objectives of the research. The novel algorithm facilitated a comprehensive understanding of the complexities underlying stress dynamics among managerial and technical graduates in the post-COVID-19 era. Through meticulous interpretation, the findings were contextualized within existing literature and theoretical frameworks, elucidating their implications for practice and policy.

Analysis and Interpretation

Table 1 Distribution of Respondents based on the Initial Symptoms of Covid 19

Affected by covid	Managerial (N=320)	Technical (N=86)	Total Respondents (N=406)
Affected	116 (36.3)	40 (46.5)	156 (38.4)
Not Affected	204 (63.7)	46 (53.5)	250 (61.6)
Total	320 (100.0)	86 (100.0)	406 (100.0)

Initial symptoms	Managerial (N=116)	Technical (N=40)	Total Respondents (N=156)
Sudden fever	22 (19.0)	7 (17.5)	29 (18.6)
Fever with severing	21 (18.1)	3 (7.5)	24 (15.4)
Stomach pain	14 (12.1)	6 (15.0)	20 (12.8)
Fever with severe body pain	31 (26.7)	12 (30.0)	43 (27.6)
Throat infection	10 (8.6)	7 (17.5)	17 (10.9)
Incessant cough	7 (6.0)	3 (7.5)	10 (6.4)
Tastelessness feeling	2 (1.7)	0	2 (1.3)
Other symptoms	9 (7.8)	2 (5.0)	11 (7.1)
Total	116 (100.0)	40 (100.0)	156 (100.0)
Medical consultation	Managerial (N=116)	Technical (N=40)	Total Respondents (N=156)
Consulted	98 (84.5)	22 (55.0)	120 (76.9)
Not Consulted	18 (15.5)	18 (45.0)	36 (23.1)
Total	116 (100.0)	40 (100.0)	156 (100.0)

Note: Figures in parentheses are percentages to column total

This research conducted among management and technical graduates covered a total of 406 respondents consisting of 320 managerial and 86 technical graduates. It is reported that about 38.40 percent of the respondents were affected by the Covid –19 and rest were not affected. Those who were affected by Covid – 19 reported different symptoms. The prominent symptoms are (i) fever with severe body pain (27.6%); Sudden fever with high temperature (18.6%); fever with severing (15.4%) and stomach pain (12.8%). The other symptoms felt by the Covid – 19 affected include throat infection, incessant cough and tastelessness feeling. Thus fever with allied symptoms was the most common symptom felt by the respondents. It is reported further that a vast majority of the Covid – 19 affected respondents (76.9%) had medical consultation at the earliest possible time.

Attempting to understand the differences if any between managerial and technical graduates in respects of being affected by Covid 19, the initial symptoms and having taken medical consultation, sizable difference is noticed only in respect of medical consultation. The technically qualified respondents were found to have not shown required attention for taking medical treatment.

Affected by COVID-19

This graph illustrates the percentage of managerial and technical graduates affected by COVID-19. Among managerial graduates, 36.3% were affected, while among technical graduates, the percentage was slightly higher at 46.5%. The graph highlights the differential

impact of the pandemic on these two groups, with technical graduates experiencing a slightly higher incidence of COVID-19.

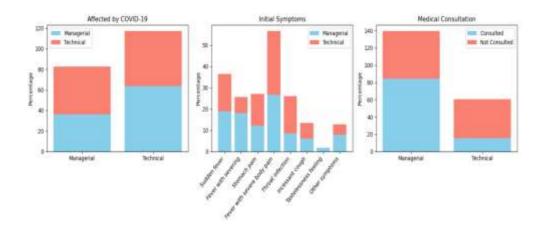


Figure 1: Analysis of COVID-19 Impact on Managerial and Technical Graduates

Initial Symptoms

This graph presents the distribution of initial symptoms experienced by managerial and technical graduates who were affected by COVID-19. It showcases the percentages of respondents reporting various symptoms such as sudden fever, stomach pain, and throat infection. The data indicates differences in the prevalence of certain symptoms between managerial and technical graduates, providing insights into the diverse manifestations of COVID-19 among these groups.

Table 2 Distribution of Respondents based on the Family Members Affected

No. of Respondents affected	Managerial (N=116)	Technical (N=40)	Total Respondents (N=156)
Only one affected	93 (80.2)	37 (92.5)	130 (83.3)
More than one affected	23 (19.8)	3 (7.5)	26 (16.7)
Total	116 (100.0)	40 (100.0)	156 (100.0)
Members of the family affected	Managerial (N=116)	Technical (N=40)	Total Respondents (N=156)
None	93 (80.2)	37 (92.5)	130 (83.3)
All Family Members	18 (15.5)	0	18 (11.5)
Spouse	5 (4.3)	3 (7.5)	8 (5.2)

Total	116 (100.0)	40 (100.0)	156 (100.0)

Note: Figures in parentheses are percentages to column total

With regard to the number of persons affected, it is reported that in the case of 83.3% of the respondents only one i.e., the respondent alone in the family was affected and in the rest of the cases more than one person was reported of having affected. Of the 26 cases, 18 reported that all the family members were affected in their family and the spouse was affected in rest of the cases. Further analysis in regard to differences if any in the number of family members affected, we could notice a sizable difference between managerial and technical candidates.

Table 3 Distribution of the respondents based on the duration of Covid 19

Number of days under Covid 19	Managerial (N=116)	Technical (N=40)	Total Respondents (N=156)
1 to 7 days	72 (62.1)	30 (75.0)	102 (65.4)
8 to 14 days	25 (21.6)	6 (15.0)	31 (19.9)
More than 15 days	19 (16.3)	4 (10.0)	23(14.7)

Source: Field data collected during the period between August and October 2022.

Note: Figures in parentheses are percentages to column total

The data on the duration of illness revealed that it varied from one day to 60 days. In majority of the cases it last for one week time (65.4%) followed by 19.9 percent with two weeks time. The cases in which it lasted for more than two weeks accounted for 14.7 %. In respect of duration of illness, majority of the technically qualified people had shorter duration when compared to the managerial graduates.

Table 4 Distribution of respondents based on the results of the Covid 19 tests

RTPCR text taken	Managerial (N=116)	Technical (N=40)	Total Respondents (N=156)
Taken RTPCR	96 (82.8)	28 (70.0)	124 (79.5)
Not Taken	10 (17.2)	12 (30.0)	32 (20.5)
Total	116 (100.)	40 (100.0)	156 (100.0)
Result of RTPCR	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
Positive	72 (75.0)	12 (42.9)	84 (67.7)
Negative	24 (25.0)	16 (57.1)	40 (32.3)
Total	96 (100.0)	28 (100.0)	124 (100.0)

Taken CT scan	Managerial (N=116)	Technical (N=40)	Total Respondents (N=156)
CT scan taken	58 (50.0)	28 (70.0)	86 (55.1)
CT scan not taken	58 (50.0)	12 (30.0)	70 (44.9)
Total	116 (100.0)	40 (100.0)	156 (100.0)
Result of CT scan (%)	Managerial (N=58)	Technical (N=28)	Total Respondents (N=86)
<20	16 (27.6)	6 (21.4)	22 (25.6)
20-40	21 (36.2)	13 (46.4)	34 (39.5)
40-60	11 (19.0	5 (17.9)	16 (18.6)
>60	10 (17.2)	4 (14.3)	14 (16.3)
Total	58 (100.0)	28 (100.0)	86 (100.0)
Final result	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
RTPCR Negative with lungs infection	24 (25.0)	16 (57.1)	40 (32.3)
RTPCR positive but no lungs infection	64 (66.7)	12 (42.9)	76 (61.3)
RTPCR positive and lungs infection	8 (8.3)	0	8 (6.5)
Total	96 (100.0)	28 (100.0)	124 (100.0)

Note: Figures in parentheses are percentages to column total

It is seen from the table that majority of the respondents who reported of having affected by the COVID - 19 took RTPCR test. Those who had not taken the test accounted for 20.5% Among those who had taken the test more than two thirds tested COVID - 19 positive. 86 out of 156 COVID - 19 affected respondents had also undergone CT Scan for examining the lung involvement due to COVID - 19. The results of the CT scan have shown that about three fourths of the respondents had more than 20 percent lungs involvement.

Further analysis of RTPCR and CT scan results show that 32.3 percent respondents had a report of RTPCR negative but with lung infection and 61.3 percent RTPCR positive cases did not have lung infection at all. While in the case of 6.5 percent of respondents whose RTPCR and CT Scan positive results. It can thus be stated that the COVID – 19 infection had different symptoms on different individuals.

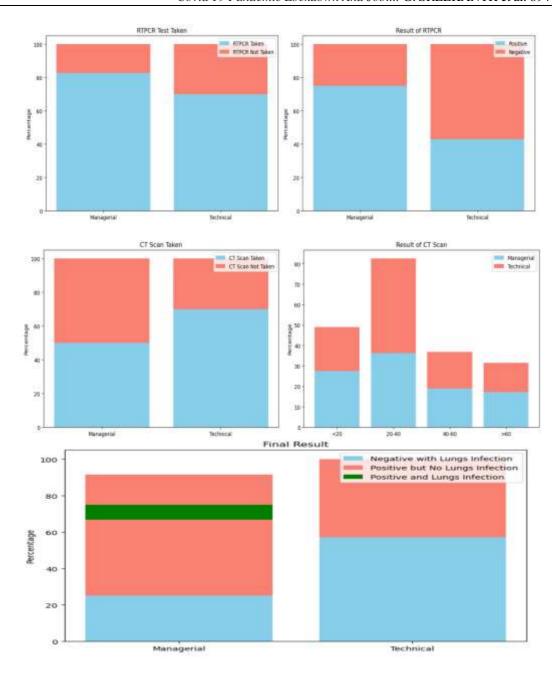


Figure 2: Analysis of Diagnostic Testing and Results among Managerial and Technical Graduates

RTPCR Test Taken

This graph depicts the percentage of managerial and technical graduates who underwent RTPCR testing for COVID-19. Among managerial graduates, 82.8% underwent the test, compared to 70.0% of technical graduates. The graph highlights differences in testing rates between the two groups, providing insights into testing behavior among different cohorts.

Result of RTPCR

This graph illustrates the outcomes of RTPCR testing among managerial and technical graduates. It showcases the percentages of respondents testing positive and negative for COVID-19. The data reveals variations in positivity rates between managerial and technical graduates, reflecting differences in the prevalence of COVID-19 within these populations.

The fifth graph illustrates the final diagnostic outcomes among managerial and technical graduates, considering RTPCR results and CT scan findings. It delineates the proportions of respondents testing negative with lung infection, testing positive but without lung infection, and testing positive with lung infection. The data elucidates the clinical course and outcomes of COVID-19 among managerial and technical populations, offering valuable insights into disease severity and prognosis within these groups.

Table 5 Perception and Feelings of the Respondents regarding positive result of Covid 19

Feeling of positive result	Managerial (N=72)	Technical (N=12)	Total Respondents (N=84)
Felt so much of fear and anxiety	18 (25.0)	2 (16.7)	20 (23.8)
Felt that it is like any other disease	33 (45.8)	5 (41.7)	38 (45.2)
Felt that I was in a very dangerous situation	15 (20.8)	2 (16.7)	17 (20.2)
I did not have any feeling and I remained very normal person	6 (8.3)	3 (25.0)	9 (10.7)
Total	72 (100.0)	12 (100.)	84 (100.0)

Source: Field data collected during the period between August and October 2022.

Note: Figures in parentheses are percentages to column total

The data on table 5 present the feelings of the respondents on hearing that they tested positive COVID - 19. About one fourth of the respondents (23.8%) who tested covid 19 positive reported of having felt so much of fear and anxiety and another 20.2 percent felt that he/she was in a very dangerous condition. But 45.2 percent of the respondents reported that they felt that it was like any other disease and 10.7 per cent reported that they did not have any

feeling fear and remained as a very normal person. Thus, the COVID-19 positive results have made the respondents to have mixed response of fear and anxiety in about 50 percent of the affected people.

Though there is no much difference in terms of percentage, the technically qualified people are found to be more courageous than the managerial graduates in terms of facing fatal diseases like covid 19.

Table 6 Reasons for fear and anxiety as reported by the respondents

Reasons for fear and anxiety	Managerial (N=18)	Technical (N=2)	Total Respondents (N=20)
Fatal character of the pandemic	11 (61.1)	0	11 (55.0)
The death of friends and relatives	2 (11.1)	0	2 (10.0)
Death reported in the neighborhood	2 (11.1)	0	2 (10.0)
Death of family members	1 (5.6)	2 (100.0)	3 (15.0)
The information of fatal nature of disease received from the social media	2 (11.1)	0	2 (10.0)
Total	18 (100.0)	2 (100.0)	20 (100.0)

Source: Field data collected during the period between August and October 2022.

Note: Figures in parentheses are percentages to column total

Death of friends and relatives; death happened in the neighbourhood; and the information on the fatal nature of the pandemic as reported in the Social Media accounted for 10 percent each for the fear and anxiety among the COVID - 19 affected persons.

Further analysis revealed that the single most reason for developing fear and anxiety on hearing the COVID-19 positive result was the fatal character of the pandemic (55%) followed by the death of the family member due to pandemic (15%)

Table 7 Past health history of Covid 19 affected respondents

History	Managerial (N=116)	Technical (N=40)	Total Respondents (N=156)
yes	49 (42.2)	9 (22.5)	58 (37.2)
No	67 (57.8)	31 (77.5)	98 (62.8)
Total	116 (100.0)	40 (100.0)	156 (100.0)
Diseases reported	Managerial (N=49)	Technical (N=9)	Total Respondents (N=58)

Cough /cold	22 (44.9)	2 (22.2)	24 (41.4)
Cold / Asthma	18 (36.7)	2 (22.2)	20 (34.5)
Frequent fever	9 (18.4)	5 (55.6)	14 (24.1)
Total	49 (100.0)	9 (100.0)	58 (100.1)

Note: Figures in parentheses are percentages to column total

It is understood from the responses from the respondents that 37.2~% of the COVID -19 affected have had the post history of prolonged illness such as cough and cold / asthmatic complaint. Among these respondent's chronical cough was reported by 41.4 per cent, Asthma was reported by 34.5 percent and frequent fever was reported by 24.1 per cent covid 19 affected respondents. Substantial variations are noted between the managerial and technical graduates in respect of their past health history.

Table 8 Health seeking behavior of the covid 19 affected respondents

After test result	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
Took medicine for the symptoms	30 (31.3)	6 (21.4)	36 (29.0)
Approached private clinic	33 (34.4)	11 (39.3)	44 (35.5)
Approached the quarantine centre	19 (19.8)	11 (39.3)	30 (24.2)
Approached government hospital	14 (14.6)	0	14 (11.3)
Total	96 (100.0)	28 (100.0)	124 (100.0)

Source: Field data collected during the period between August and October 2022.

Note: Figures in parentheses are percentages to column total

It is seen from the table 8 that about 29 percent of the COVID - 19 affected respondents reported that they have taken medicine for the symptoms; the rest approached the Hospital for treatment. Among these most of them approached the authorized private clinics (35.5%) and 24.2% approached the quarantine centers and about 11.3% approached the government hospital for treatment. Thus, about two thirds of the respondents have received proper medical treatment either from the public or private hospitals authorized to treat Covid - 19 affected people.

Table 9 Choice of medical treatment opted by the covid 19 affected respondents

General medicine	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
Homeopathic	20 (20.8)	8 (28.6)	28 (22.6)
Ayurvedic	15 (15.6)	9 (32.1)	24 (19.4)
Naturopathy	25 (26.0)	9 (32.1)	34 (27.4)

Allopathic	24 (25.0)	2 (7.1)	26 (21.0)
Combination of homeopathic and allopathic	8 (8.3)	0	8 (6.5)
Combination of ayurvedic and allopathic	2 (2.1)	0	2 (1.6)
Combination of naturopathy and allopathic		0	0
Combination of all	2 (2.1)	0	2 (1.6)
Total	96 (100.0)	28 (100.0	124(100.0)

Note: Figures in parentheses are percentages to column total

Note: Multiple response were received

It is seen from the table 9 that the covid 19 affected people had opted for different kinds of treatment towards cure for their disease. Naturopathy was the choice of 27.4 per cent of the affected. It was followed by homeopathy (22.6 %); Allopathy (21 per cent) and Ayurvedic (19.4 per cnet) respondents. There are also cases of respondents who have taken a combination of homeopathic and allopathic medicine (6.5 %). Other combinations were found to be very meager. As the people do not have clear idea about the nature and seriousness of the disease and also about the treatment for the disease, the people adopted different kinds of treatment when they were affected.

Table 10 Kind of treatment received by the covid 19 affected

Kind of treatment received	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
Medicine only	63 (65.6)	13 (45.4)	76 (61.3)
Medicine with oxygen	33 (34.4)	15 (53.6)	48 (38.7)
Total	96 (100.)	28 (100.0)	124 (100.0)

Source: Field data collected during the period between August and October 2022.

Note: Figures in parentheses are percentages to column total

It is understood from the responses that majority 61.3% took only medicine for the disease and the rest had medicine with oxygen to recover from the disease. It is noticed that there are differences between managerial and technical graduates in respect of the kind of treatment received.

Table 11 Treatment met out from the family members and neighbors of the covid 19 affected respondents

Treatment from family members	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
Took lot of care	44 (45.8)	10 (35.7)	54 (43.5)
Kept distance	52 (54.2)	18 (64.3)	70 (56.5)
Total	96 (100.0)	28 (100.0)	124 (100.0)

Treatment from neighbours	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
Kept distance	22 (22.9)	8 (28.6)	30 (24.2)
Treated as usual	49 (51.8)	16 (57.1)	65 (52.4)
Avoided contact	25 (26.0)	4 (14.3)	29 (23.4)
Total	96 (100.)	28 (100.0)	124 (100.0)

Note: Figures in parentheses are percentages to column total

The responses regarding how the covid 19 affected member of the family was treated by others in the family are presented in table 11. It shows that in majority of the cases other family members kept distance (56.5%) to avoid contact of disease. Similarly, the affected had to meet out similar treatment from the neighbors. 24.2 % of the neighbor reportedly kept distance and another 23.4 per cent avoided contact with the affected. It is seen that there is no much difference among managerial and technical graduates in regard to treatment from other family members and neighbors.

Table 12 Period of regular post treatment received by the covid 19 affected respondents

Period of treatment	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
Less than 5 days	16 (16.7)	8 (28.6)	24 (19.4)
5-7 days	44 (45.8)	10 (35.7)	54 (43.5)
7-10 days	14 (14.6)	6 (21.4)	20 (16.1)
More than 10 days	22 (22.9)	4 (14.3)	26 (21.0)
Total	96 (100.0)	28 (100.0)	124 (100.0)
Post treatment	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
1 week	18 (18.8)	6 (21.4)	24 (19.4)
2 weeks	48 (50.0)	14 (50.0)	62 (50.0)
More than 2 weeks	30 (31.3)	8 (28.6)	38 (30.6)
Total	96 (100.0	28 (100.0)	124 (100.0)

Source: Field data collected during the period between August and October 2022.

Note: Figures in parentheses are percentages to column total

Similarly, they also reported to have taken post- treatment care for about one week to more than 2 weeks' time in order to recover fully from the effects of the Covid – 19. More than half of the affected respondents reported to have taken post treatment care for a period of two weeks and more.

Table 13 Perception of the Covid 19 affected respondents in the post Covid 19 period

Feeling after covid19	Managerial (N=96)	Technical (N=28)	Total Respondents (N=124)
I feel that I am alright	27 (28.1)	3 (10.7)	30 (24.2)
I feel some what weak	30 (31.3)	6(21.4)	36 (29.0)
I feel that I have one or other disease all the time	29 (30.2)	9 (32.1)	38 (20.6)
I have some inexplicable body condition	10 (10.4)	10 (35.7)	20 (16.1)
Total	96 (100.0)	28 (100.0)	124 (100.0)

Note: Figures in parentheses are percentages to column total

It is understood from the table 13 that only 24.2 percent of the respondents reported that they feel that they are alright after recovering from the COVID- 19. About 29.0 percent reported that they feel somewhat weak; 20.6 percent was of the feeling that they have one or other disease all the time; and 16.1 percent expressed that they have some inexplicable body condition after having recovered from the COVID- 19 infection. Thus, it can be stated that a majority of the respondents were of the opinion that they have been experiencing post-disease impact in different forms.

Conclusion

In conclusion, the proposed methodology offers a robust framework for analyzing the impact of the COVID-19 pandemic on stress levels among managerial and technical graduates. By examining variables like infection status, symptoms, and clinical outcomes, this study reveals the distinct stressors affecting these groups. The insights gained underscore the need for targeted interventions to alleviate psychological distress and bolster resilience, paving the way for customized support and coping strategies tailored to their unique challenges.

Future Work

Future research should explore longitudinal studies to track stress over time, comparative analyses with other demographics, and qualitative methods to deepen insights. Developing targeted interventions and resilience-building strategies is crucial. Policy implications should be considered to support mental health during crises. Expanding to global perspectives can reveal cross-cultural variations in stress and coping mechanisms. These efforts will enhance understanding and inform evidence-based practices to promote mental well-being among managerial and technical graduates.

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