

An Effect on Performance Level and Stress of Employees in Private Factory Due to Covid 19 Pandemic Periods

Anamika Mahalwar¹, Dr Vivek Mahalwar², Vaidya Heerachand Patel³

¹Phd Scholar ISBM University Gariyabandh Chura Chhattisgarh

²Associate Professor Government Ayurved College & Hospital Bilaspur

³Assistant Professor Government Ayurved College Hospital Bilaspur

ABSTRACT

In India the first case of COVID-19 reported on January 30th 2020, following the lock down was executed on 24th March for 21 days. This was the biggest stream of mass return in the country. The very effort to stave off the pandemic turned into one of the greatest human tragedies in India's recent history.

Industries complete their work with the help of resources such as men, machines, materials and funds. Except manpower other resources are non-living but manpower is a live and generating resource. Manpower is not available like Covid pandemic then other resources are useless and cannot produce anything. Out of all the factors of production, Manpower has the highest priority with most significant factors for production and important role plays in areas of manufacturing and quality.

Social impacts of COVID-19 in India there were many challenges migrants faced during the nation-wide lockdown like lack of food, basic amenities, lack of health care, economic stress, lack of transportation facilities to return to their home places and psychological support loss.

So present study is carrying out to determine Performance level of Industrial employees of Chhattisgarh before and during pandemic period.

Keywords: Covid- 19, Pandemic, Performance, Manpower, Economy

INTRODUCTION

India's economy has a damaging impact caused due to a total lockdown was imminent. India saw an unemployment rate of over six percent in January 2021. In April 2020 unemployment went up to nearly 24 percent as a result of a decrease in demand as well as the disruption of workforce faced by companies. This caused more than 9% GVA loss.

First and second wave effect

First wave

Manufacturing sector of India contributes around 16-17% of the GDP and provides employment to nearly about 20% of all workforces. During the first wave of the pandemic workforce was severely impacted, lockdown-imposed restrictions on the movement of goods and people, capacity and disrupted supply chains, bringing nearly all manufacturing activity to a stop.

The key issues impacting the manufacturing sector are listed given below:

- Supply chain Distribution / Raw Material shortage
- Capacity Underutilization
- Labour Shortage
- Weaker Demand
- Special Regulatory
- Liquidity Crunch

Second wave

2021 beginning a second wave was witnessed. India faced further uncertainty as cases increased far more rapidly than the first wave. Retailers and small businesses were bored due to lockdown of the second wave as they faced uncertainty in working condition.¹

There is the association between economic growth and manufacturing. In the economic growth two sets of explanations for manufacturing sector was evidenced according to Economists.

The first one looks at how the properties influence returns and economic growth, the second centers on the special properties of manufacturing.

Employees also affected in several ways like work at home, complete their work at time limit duration without any major support. The key issues impacting in performance of employees are Sufficient Knowledge of work, Job Satisfaction, Information Technology Efficient, Employer satisfaction, Duty Goal, Time line work, Problem based solution etc affect in their work performance during pandemic period.

Seeing all above points there was significant decrease in Performance level and significant increase in Professional stress level of Industrial employees of Chhattisgarh.

Performance management level

In the current times of cut throat competition performance management is the current new word and is the need of the organizational battle for leadership. A strategic and an integrated both approach is implementing results in organizations by improving the performance and developing the capabilities of teams and individuals in the Performance Management according to Armstrong and Baron (1998).²

Evolution of Performance Management

The performance management vision and mission approach has become an indispensable tool in the hands of the corporate; as it ensures that the people uphold the corporate values. It is a forward looking process as it involves both the supervisor and also the employee in a process as it involves both the supervisor and also the employee in a process of joint planning and goal setting in the beginning of the aim work. The importance of performance management gained time to time when the competitive pressures in the market place started rising and the organizations felt the need of introducing a comprehensive performance management process are the systems for improving the performance effectives and overall productivity.^{3,4}

The present study aims at undermining and analyzing those factors which affect the productivity in private sectors factory. Every corporate model becomes ambitious in terms of great management skills, smart and young staff and inclusion of technology based governance leading to time-saving and cost-effectiveness. Again, the performance of these industries is judged from their customer view point, their

access to the product and overall satisfaction. Customers are important because this is the major factor deciding the future of an industry, its positioning in the globe compared to other world class set ups. In a way, the customer satisfaction and employee satisfaction are mutually correlated thereby influencing each other. It is necessary that the managers to felicitate the performance levels of workers and simultaneously keep them satisfied in an appropriate organizational climate so that the maximum customer satisfaction can be achieved.

In this context, the present research has attempted to study the performance level of the employees of selected private sector industry. This study would statistically determine the levels of performance of these employees along with a comparative analysis of the performance of male employees versus female employees, more experienced versus less experienced employees and high salaried versus low salaried employees. The study undermines the causes behind individual differences with the employees' performance in their job.

Review of Related Literature:

Leung 2009 "Manager's occupational stress in state owned and private enterprises in the people's Republic of China" has showed that managers in private enterprises experienced psychological strains and higher levels of occupational stressors than those in state-owned enterprises. 'Organizational structure and climate' proves a big stressor when predicting both physical strain and psychological in both economic sectors.⁵

Amir Shani and Abraham Pizam (2009) "work- Related Depression among Hotel Employees" article on depression of work among hotel employees in Central Florida. characteristics have confirmed the incidence of depression among workers in the hospitality industry.⁶

Alyahya, Mohammed Saad et al., 2013 For the productivity leads improvement in employee commitment as norms, values and objectives helps in improving culture of an organization certain factors that improve organizational development has sustainability on basis of effectiveness. Performance of workers improves by establishment of strong effective culture on industry. The system of organization was based upon establishment of effective culture that keep learning environment strong. The employee performance would be considered as backbone organization as it leads to its development effectively.⁷

Michael A. Akinbowale Melanie E. Lourens Dinesh C. Jinabhai et al., 2014 Performance appraisal policy has been viewed by organizations & HR practitioners. Effective performance appraisal policy remains a practical challenge to owners & workers because of cognitive, motivational and behavioral factors. There are various methods of performance appraisal. Each organization may have its own method of appraisal and unique policy. Ideally, a performance appraisal policy should be objective, accurate and easy to perform.⁸

Christopher Mathews I. K. Khann et al., 2015, Employees are more than the most important asset for an organization, they play pivotal role in current operational performance and future competitive advantage. Employees within which they work spend major part of their life in the organization. The relationship between workplace environment and productivity was the main objective of this work. Poor environmental conditions can cause inefficient worker productivity as well as reduce their job satisfaction. The works generated by employees are influenced by the work environment. This work is expected to show that work environment have great impact on the performance level of employees of manufacturing sector in India.⁹

Longe Olukayode et al., 2017 assessed work stress factors - a selected manufacturing organization. The identified causal elements were work load, role ambiguity, and insecure organizational tenure, exposure to unfavorable working conditions, long working time & non-control over work-pace. Furthermore, it proves negative statistically determinate linear relationship between all the identified work stress factors & performance, denoting that stress factors increase which decreases performance of job. Study says that stressors inherent in manufacturing organizations predisposed worker on job related stress, thereby impairing their job performance.¹⁰

Beyza ERER et al., 2020 Covid-19, Covid-19 continues to exert its effects on psycho-social health as well as physical health and deeply affects human behavior. It have negative impacts on many behaviors, from the way employees do business to their performance, and satisfaction with job to quitting job. The study stated impact of Covid-19 fear on employee performance. As indicate that workers have high levels of fear of Covid-19; it proves a negative, moderate and significant correlation between fear of Covid-19 and employee performance.¹¹

Araştırma Makalesi et al., 2020 Covid-19 continues to exert its effects on psycho-social health as well as physical health and deeply affects human behavior. Covid-19 have negative impacts on many behaviors, from the way employees do business to their performance, and from their job satisfaction to quitting job. It shows that edition, for this purpose, "Covid19 Fear Scale" and "Employee Performance Scale" was developed. Fear of Covid-19 significantly predicted employee performance.¹²

S. Mahendra Dev and Rajeswari Sengupta et al., (2021) The outbreak of the Covid-19 pandemic is an unprecedented shock to the Indian economy. With the country-wide lockdown associated disruption of demand and supply chains and global economic downturn, the economy is likely to face a protracted period of slowdown.¹³

Objectives

The following objectives of the study are given bellow:

1. To find out performance level of employees before and during COVID- 19 pandemic periods.
2. To find out professional stress of employees before and during Covid- 19 pandemic periods.

Operational definition of the important terms

1. Performance level of employees before and during Covid- 19, there is significant difference.
2. Professional stress of employees before and during Covid- 19, there is significant difference.

METHODOLOGY

Performance Appraisal Scale

For making a performance Appraisal Scale to evaluate the level of performance of employees before and during Covid 19 phase I and Phase II of Vardhman Trading Pvt Ltd Durg Chhattisgarh was selected for present investigation.

Need for Construction of Performance Appraisal Scale for Employees

Quantitative and qualitative aspect of work that were the variables for evaluate, the behavior of workers in the workplace. Performance Appraisal is an objective analysis. How the employee is performing, how the employees can develop, what the superior can do to make it happen and how the job is going are the questions associated with man management. It provides information about the performance ranks,

decision regarding salary revision, confirmation, promotion and demotions. It provides feedback about level of achievement and behavior of the subordinate. It provides information that helps to counsel the employees. It provides information to diagnose the deficiency of the employees. It provides training and development needs of the employees.

Try out of the Scale

Instruction were given to 30 employees and asked each to respond item.

The responses were made on the datasheet. Scoring pattern was followed. In the cases of positive (+ve) items (favorable attitude)

Comments	Score
Strongly agree mark given -	5
Agree -	4
Undecided -	3
Disagree response -	2
Strongly disagree response-	1.

By adding up scores a total score for every single one were made and recorded in datasheet that is Master Chart.

The Final Scales

Grand Final scale were made, 30 workers divided before Covid- 19 and during Covid- 19 were selected. Mater Chart was prepared for printing and final evaluation. Each item was rate on a 5 point scale; so the maximum score was 30 x 5 = 150 and minimum score was 30 x 1 = 30.

Selection of Items

Scores based upon the above pattern responses to all statements employees were with the highest total scores and employees were with the lowest total scores were taken for establishing the discriminating value of each statement. There are 3 groups provide criterion groups which were assessed the individual statements. In evaluating scores before Covid period and during Covid period phase I (2020-2021) and phase II (2021 – 2022) to the individual statements, the ratio of ‘t value were found out. The t value were calculated by using standard formula.

Table 1 ‘t’ value of 27 statement for groups of the performance level scale

Sr. No.	Performance Level	t value	
		DC I	DC II
1	Sufficient Knowledge of work	0.316	4
2	Job Satisfaction	0	0
3	Knowledge of Organization Rules and Regulation	2	0.312
4	Information Technology Efficient	4	1.5
5	Employer satisfaction	3	4.2
6	Discipline	1	3
7	Duty Goal	3	0.0027
8	Duty Responsibility	0	0.04

9	Vision	3	5
10	Acceptance level	3	2.8
11	Time line work	4	0.04
12	Problem based solution	0.177	0.005
13	Punctuality	0.19	0.007
14	Creative of Democratic Environment	0	0.31
15	Team Work	2	1.258
16	Decision Making Power	0.006	0.05
17	Professional Ethics	8	0.0049
18	Good Ability Communication	2	8
19	Work Situation Adjustment	0.055	0.003
20	New Ideas Creation	0.02	0
21	Learning Capacity of New thing	3	2.8
22	Improvement design	5.7	5.2
23	Criticism Acceptance	0.375	0.103
24	Resources Utilization	0.201	0.007
25	Motivation	3	8
26	Self commitment	0.3339	0.15
27	Situation handling capacity	4	1

The 27 statements in the performance scale of Employees indicate the ‘t’ value. So the final performance scale comprises of 30 workers.

Main Findings

Analysis and interpretation of Data

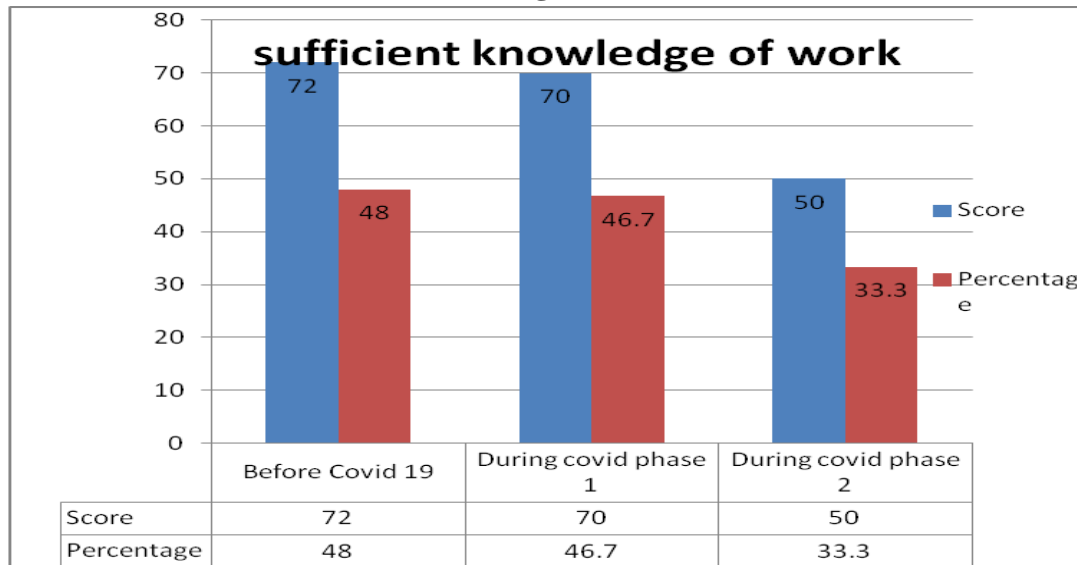
PERFORMANCE ON SUFFICIENT KNOWLEDGE OF WORK WITH EMPLOYEES

Table No 2

No. of Employee	Before Covid- 19		During Covid- 19 phase 1		During Covid- 19 phase 2	
	scoring	%	scoring	%	scoring	%
30	72	48 %	70	46.7 %	50	33.3 %

From the above table before Covid- 19 forty-eight percent employees has sufficient knowledge of work which is decreased due to lock down during Covid- 19 phase 1 i.e. 46.7% and during Covid- 19 phase 2 it was 33.3% due to fear, mass death and lockdown.

Graphical Presentation- 1 Comparative bar graph showing employees according to sufficient knowledge of work



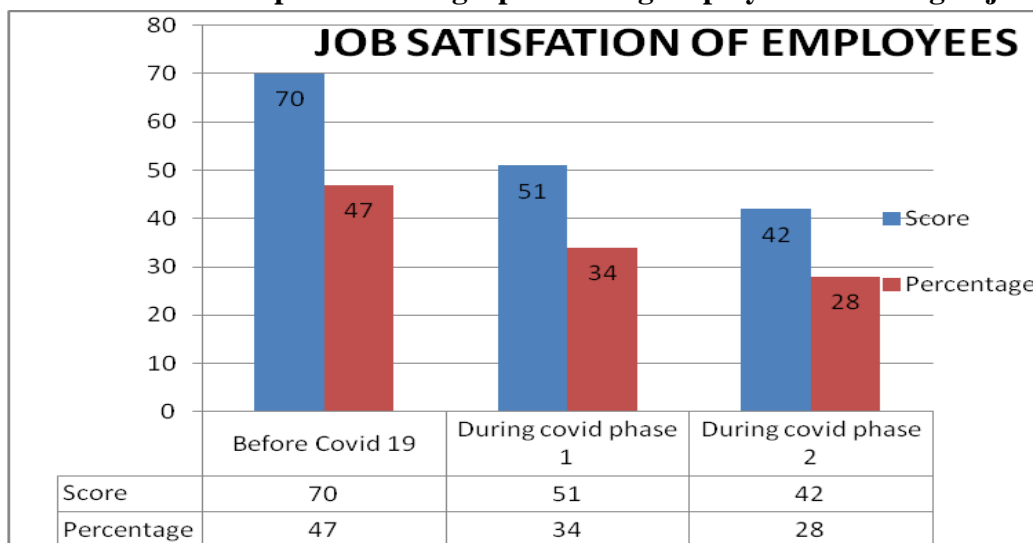
PERFORMANCE OF JOB SATISFATION OF EMPLOYEES

Table No 3

No. of Employee	Before Covid- 19		During Covid- 19 phase 1		During Covid- 19 phase 2	
	scoring	%	scoring	%	scoring	%
30	70	47 %	51	34 %	42	28 %

From the above table before Covid- 19 forty seven percent employees has job satisfaction of work which is decreased due to lock down during Covid- 19 phase 1 i.e. 34% and during Covid- 19 phase 2 it was 28% due to fear, mass death and lockdown.

Graphical Presentation-2 Comparative bar graph showing employees according to job satisfaction



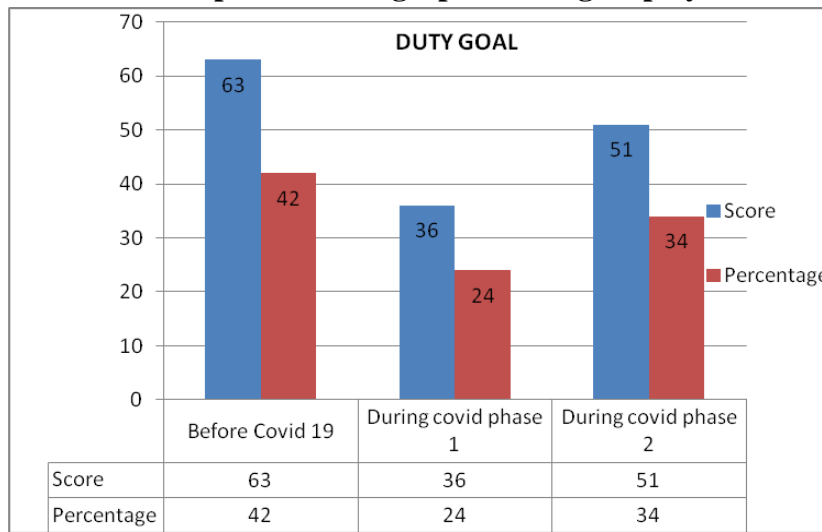
PERFORMANCE ON OF DUTY GOAL

Table No 4

No. of Employee	Before Covid- 19		During Covid- 19 phase 1		During Covid- 19 phase 2	
	scoring	%	scoring	%	scoring	%
30	63	42%	36	24 %	51	34 %

From the above table before Covid- 19 it was observed that the 42 % employee has duty goal knowledge which was decreased during Covid- 19 phase 1 and became 24 % due to lock down. During Covid- 19 phase 2 it was 34 % due to fear, mass death and lockdown.

Graphical Presentation- 3 Comparative bar graph showing employees according to duty goal



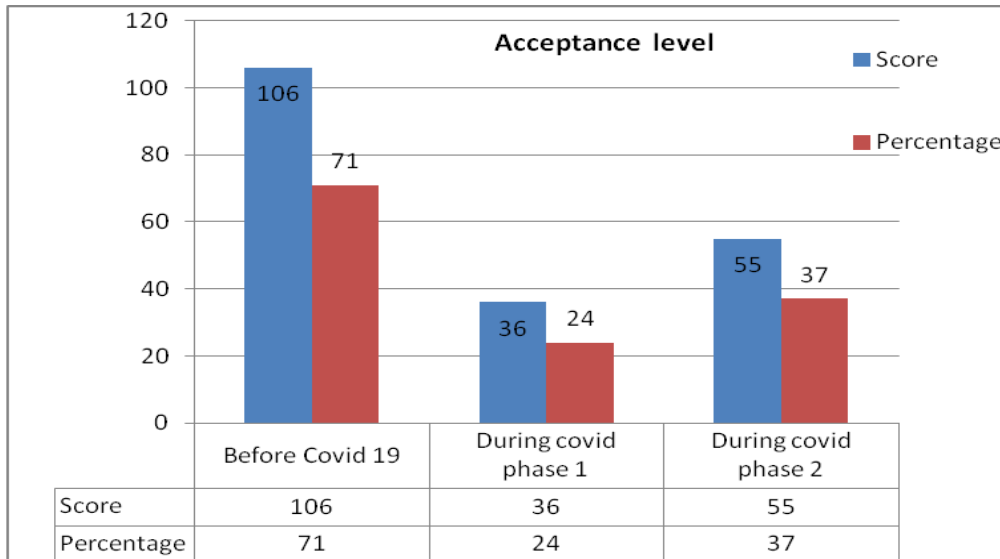
PERFORMANCE OF WORK ACCEPTANCE LEVEL

Table No 5

No. of Employee	Before Covid- 19		During Covid- 19 phase 1		During Covid- 19 phase 2	
	scoring	%	scoring	%	scoring	%
30	106	71%	36	24%	55	37%

From the above table before Covid- 19 it was observed that the 71 % level employees has work acceptance level which was decreased due to lock down during Covid- 19 phase 1 i.e. 24 % and during Covid- 19 phase 2 it was 37 % due to fear, mass death and lockdown.

Graphical Presentation- 4 Comparative bar graph showing employees according to acceptance level



PERFORMANCE OF EMPLOYEES ON SUFFICIENT KNOWLEDGE OF WORK

Performance on sufficient knowledge of work in factory employees is the one important subject of investigation. The Hypothesis states that in the mean performance scale scores of before and during covid period is same of the employees in the industry, keeping it in mind the standard scores were analyzed with the help of ‘t’ test. The results are presented in table:

Table No.6, Statistical analysis of employee’s sufficient knowledge of work

Sl no	Criteria	B.C. (Mean ± SE)	Period	D.C. (Mean ± SE)	%	df	SD	‘ t ’	P	Remarks
3	Sufficient Knowledge of work	2.4 ± 0.2199	BC	2.4 ± 0.2199	48%	29	1.549	-	-	-
			DC-I	2.33 ± 0.1515	46.7%	29	0.829	0.312	<0.05	NS
			DC-II	1.66 ± 0.1694	33.3%	29	0.928	4.10	>0.05	S

From the above table, it is observed that the ‘t’ value was no significant during Covid- 19 phase 1 but significant during phase 2. It indicates that the mean performance scale scores of sufficient knowledge of work of employees was significantly different during Covid- 19 phase 2, So Hypothesis no significant difference in the Mean performance scale scores of sufficient knowledge is rejected during Covid- 19 phase 2 and accepted during Covid- 19 phase 1 period. Again it may be stated that the Mean performance scale scores of sufficient knowledge are 2.4, 2.33 and 1.6 respectively.

Result:

From the findings of the objective states that the more experienced employees possess more performance than the less experienced employees. The cause may be that the more experienced

employee’s faces excessive work load political pressures, greater responsibility for the progress and prosperity of the organization.

PERFORMANCE ON JOB SATISFATION OF EMPLOYEES

Performance on job satisfaction rules and regulation of factory employees is the one important subject of investigation. The Hypothesis states that in the mean performance scale scores of before and during covid period is same of the employees in the industry, keeping it in mind the standard scores were analyzed with the help of ‘t’ test. The results are presented in table.

Table No.7, Statistical analysis of employees’ job satisfaction

no	Criteria	B.C. (Mean ± SE)	Period	D.C. (Mean ± SE)	%	df	SD	‘ t ’	P	Remarks
2	Job Satisfaction	2.33 ± 0.127S	BC	2.33 ± 0.127	47%	29	0.699	-	-	-
			DC-I	1.7 ± 0.116	34%	29	0.640	4.06	>0.05	S
			DC-II	1.1 ± 0.089	28%	29	0.489	0	<0.05	NS

From the above table, it is observed that the ‘t’ value is significant during Covid- 19 phase 1 but during phase 2 it is no significant. It indicates that the mean performance scale scores of job satisfaction of employees significantly different. So Hypothesis during Covid- 19 phase 1 significant difference in the mean performance scale scores of job satisfaction is rejected and accepted during Covid- 19 phase 2. Again it may be stated that the Mean performance scale scores of job satisfaction are **2.333, 1.7** and **1.4** respectively.

PERFORMANCE ON DUTY GOAL OF EMPLOYEES

Performance of employee’s duty goal in factory is the one important subject of investigation. The Hypothesis states that in the mean performance scale scores of before and during covid period is same of the employees, keeping it in mind the standard scores were analyzed with the help of ‘t’ test. The results are presented in table:

Table No.8, Statistical analysis of employee’s duty goal of work

Sl no	Criteria	B.C. (Mean ± SE)	Period	D.C. (Mean ± SE)	%	df	SD	‘ t ’	P	Remarks
5	Duty Goal	2.1± 0.128	BC	2.1± 0.128	42%	29	0.7	-	-	-
			DC-I	1.2± 0.087	24%	29	0.476	3	>0.05	NS
			DC-II	1.7± 0.143	34%	29	0.781	0.0027	<0.05	S

From the above table, it is observed that the ‘t’ value was no significant during Covid- 19 phase 1 but significant during phase 2. It indicates that the mean performance scale scores of duty goal of employees significantly different during Covid- 19 phase 2. So Hypothesis i.e. significantly difference in the mean performance scale scores of duty goal is accepted during Covid- 19 phase 1 period and rejected during Covid- 19 phase 2 period. Again it may be stated that the Mean performance scale scores of duty goal are **2.1, 1.2** and **1.7** respectively.

PERFORMANCE ON ACCEPTANCE LEVEL OF EMPLOYEES

Performance of employee’s acceptance level in factory is the one important subject of investigation. The Hypothesis states that in the mean performance scale scores of before and during covid period was same, keeping it in mind the standard scores were analyzed with the help of ‘t’ test. The results are presented in table:

Table No.9, Statistical analysis of employee’s acceptance level

Sl no	Criteria	B.C. (Mean ± SE)	Period	D.C. (Mean ± SE)	%	df	SD	‘t’	P	Remarks
8	Acceptance level	3.533 ± 0.124	BC	3.533 ± 0.124	71%	29	0.669	-	-	-
			DC-I	1.2 ± 0.073	24%	29	0.4	3.0	>0.05	S
			DC-II	1.833 ± 0.108	32%	29	0.582	2.8	>0.05	S

From the above table, it is observed that the ‘t’ value was significant in both the periods. It indicates that the mean performance scale scores of acceptance level of employees significantly different before and during Covid- 19 phase 1 & phase 2. So Hypothesis i.e. significant difference in the Mean performance scale scores of acceptance level is rejected Again it may be stated that the Mean performance scale scores of acceptance level are 3.53, **1.2** and **1.8** respectively.

Discussion

- **SUFFICIENT KNOWLEDGE OF WORK:** In present study before Covid- 19 period 48% employees had sufficient knowledge of work, 46.7 % during 1st phase of Covid- 19 period, 33.3 % during 2nd phase of Covid- 19 period. it proves that due to mass death ,fear and lockdown sufficient knowledge of work was lacking and decreased. Peoples don’t know how to work in Covid- 19 situation.
- **Job Satisfaction:** In present study before Covid- 19 period 47% employees had Job Satisfaction, 34 % during 1st phase of Covid- 19 period, 28 % during 2nd phase of Covid- 19 period. It proves that during Covid- 19 and lockdown periods Job Satisfaction was lacking and decreased. Peoples didn’t satisfy from their work in Covid- 19 situation.
- **Duty Goal:** In present study before Covid- 19 period 42% employees had duty goal of work, 24 % during 1st phase of Covid- 19 period, 34 % during 2nd phase of Covid- 19 period. It proves that due to d lockdown Covid periods duty goal of work was lacking and decreased. Peoples don’t know how to work in Covid- 19 situation.

- **Acceptance level:** In present study before Covid- 19 period 62% employees had acceptance level for their work, during 1st phase of Covid- 19 period become 24 % and during 2nd phase of Covid- 19 period it was 37 %. It proves that due to mass death, fear to get infected and lockdown acceptance level of work was decreased. Peoples don't know how to accept work in this type of situation.

Conclusion:

The present study is basically designed to examine performance level and professional stress in private sector industry. We can concluded that the performance of employees is higher Before Covid- 19 than that of the during Covid- 19 periods and the stress of employees was high during Covid- 19 periods than normal days, It conclude that Covid 19 pandemic has massive effect on production, sale, performance level and professional stress.

References

1. Pravakar Sahoo and Ashwani "COVID-19 and Indian Economy: Impact on Growth, Manufacturing, Trade and MSME Sector" Global Business Review 21(5) 1159–1183, 2020 © 020 IMI Reprints and permissions: in.sagepub.com/journals-permissions-India
2. Armstrong, M. (1998), Performance management: The new realities, CIPD, London
3. Armstrong, M. (2000), Performance Management : Key Strategies and practical guidelines, 2nd edition, Kogan Page, London.
4. Bannister, B.D. and Balkin , D.B. (1990), Performance Evaluation and Compensation Feedback Messages : An Integrated Model, Journal of Occupational Psychology, Vol. 63, June 1990.
5. Sengupta Debashish , Kamal Raj Floricultural Marketing in India Paperback – July 30, 2009
6. Shrivastava Arunima and Purang Pooja Employee perceptions of job satisfaction: Comparative study on Indian banks January 2009 Asian Academy of Management Journal 14(2)
7. Alyahya, Mohammed Saad (2013), Impact of Organizational Culture on Employee Performance, International review of management and business research Vol. 2 [www. Irmbjournal.com](http://www.Irmbjournal.com) March 2013
8. Michael A. Akinbowale Melanie E. Lourens Dinesh C. Jinabhai , Employee Performance Measurement and Performance Appraisal Policy in an Organization , Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy Vol 5 No 9 May 2014 342 www.researchgate.net/publication
9. Christopher Mathews , I. K. Khann , Impact of Work Environment on Performance of Employees in Manufacturing Sector in India , International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064 Index Copernicus Value (2013): 6.14 | Impact Factor (2015): 6.391
10. Longe Olukayode, Work stress factors and employee job performance in a Nigerian manufacturing firm 1 Sep 2017: an empirical assessment Published On <https://journals.co.za/doi/epdf/10.10520/EJC-b3b32434fline>
11. Beyza Erer Impact of Covid-19 Fear on Employee Performance Social Sciences, 10 (4), 845-852, Journal of Current Researches on Social Sciences (JoCReSS) www.stracademy.org/jocress ISSN: 2547-9644
12. Research Article/Araştırma Makalesi for cited: Erer, B. (2020). Impact of Covid-19 Fear on Employee Performance. Journal of Current Researches on Social Sciences, 10 (4), 845-852. Journal

of Current Researches on Social Sciences (JoCRess) www.stracademy.org/jocress ISSN: 2547-9644
Year: 2020 Volume: 10 Issue:

13. S. Mahendra Dev) and Rajeswari Sengupta Additional contact information Indira Gandhi Institute of Development Research, Mumbai Working Papers from Indira Gandhi Institute of Development Research, Mumbai, India Covid-19: Impact on the Indian economy
<https://econpapers.repec.org/paper/indigiwpp/2020-013.htm>