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Impact of HRM practices on employee productivity in times of COVID-19 pandemic

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Abstract: The purpose of this paper is to investigate the role of various human resource management practices in contributing to employee productivity in remote work environment during the lockdown restrictions imposed because of COVID-19 pandemic. In order to achieve the objectives of our research, we have used descriptive research design and have used a survey method to collect responses of salaried employees working from home during lockdown period. The results of the study suggest that the human resource practices relating to job description, training and development, job security, equal opportunity, performance linked compensation, competence linked compensation, employee welfare all together had a significant positive effect on the maintenance and enhancement of the employee productivity. It helps the organisations to promote healthy communication, participative decision making and strategic planning for current and future growth.

Keywords: productivity; employees; HRM; workplace; pandemic; COVID-19; lockdown; work-from-home; HR-practices; management; quality.

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1 Introduction

Human resources are the lifeblood of an organisation. Therefore, every organisation must always think about their human resources with utmost concern and dignity. Human resource management needs effective HR policies and practices to retain and handle their human resources. An effective HR policy is an apparent and focused tactic to be successful in business. Success of business also depends upon employee productivity. In order to improve the productivity levels in the future, it is important to focus on enhancing factors such as organisational culture, human resource management and performance (Kamble and Wankhade, 2021). Organisations should ensure that they are providing huge opportunities to their employees for boosting their productivity at workplace. Although many organisations use various strategies such as benefit plans, training, providing comfortable workplace, conflict free work culture, etc. But nowadays work from home is also considered to be an effective HR strategy to enhance employee productivity. As per the report given by Deloitte in 2020, it is concluded that there is 60% enhancement in employee productivity times by working from home (Deloitte India, 2020).

In recent years, work from home gained a momentum as it is considered as key to achieve better work life balance (Perry-Smith and Blum, 2000). It is also proven to be win-win situation for both organisation, employees as well as for society (Peters, 2011). Work from home has more advantages than limitations because it reduces persons fatigue and enhances intrinsic motivation of employees which subsequently results in better performance of employees (Peters et al., 2014).

During the recent times, the pandemic situation has increased the importance of work from home manifolds. COVID-19 has been declared as a pandemic by the World Health Organisation. The term 'pandemic' can be defined as a disease which is dangerous and threatening for the whole world. This outbreak had started from Wuhan City of China caused by SARS-CoV-2 virus and has spread globally. Because of this pandemic, people are instructed to maintain social distance. As a result, the government has imposed mandatory lock down to protect people from this pandemic. This has made remote

working the new normal globally (Meister, 2020). Organisations are adopting several strategies to adjust with the newer ways of working in the times of uncertainties. The learnings have been taken from the times of Spanish fever of 1918 which left a shocking impact on the economy (Ceylan et al., 2020). During Spanish fever, due to the lack of IT system, organisations were not able to cope with the uncertainties. But in today's time, work from home is new normal. Every person has access to technology and can do their work more effectively as well as efficiently while staying at home. In the COVID-19 times, technology emerged as a saviour for organisations, employees, and society at large.

Despite of so many advantages of working from home, it has some limitations also. Not all employees and workers are familiar with the technology which affects their work performance. As per report only 3.4% workforce was doing WFH prior to coronavirus, which ultimately poses a threat to employee productivity as well as performance. Those having less experience of technology or new hires are at the verge of losing their jobs. Not everyone is equipped with the right technology to participate virtually (Accenture, 2020). Further, there are several other ill consequences of working from home such as reduced physical activeness, increase in the number of working hours, increased number of meetings and cybersecurity issues, etc. (Faulds and Raju, 2021).

Other than infrastructure and technology issues, lot more problems are coming in the way of managing COVID-19. Human Resource people are not able to achieve their objectives as committed. HR managers also lack the skills to cope with this crisis. They do not know how to manage this situation and are not capable of understanding government policies and regulations (PWC, 2020). They are still unable to forecast the long- and short-term impact of COVID-19 on organisations and employee performance and productivity. Along with this, strategies to maintain productivity and performance in these unprecedented times are still unclear (PWC, 2020). Most of the previous researches had discussed about the impact of work from home on performance and productivity with a limited number of employees working from home. However, this is the first time in history that the whole world is giving this system a try and planning to continue with it in the near future (Bandyopadhyay, 2020). Therefore, it is important to identify the HR measures which would be effective under such circumstances to determine the long-term efficacy of the 'work from home' system. As part of the current study, we intend to identify the relationship between human resource practices and employee productivity of associates working from home during lockdown due to the COVID-19 pandemic.

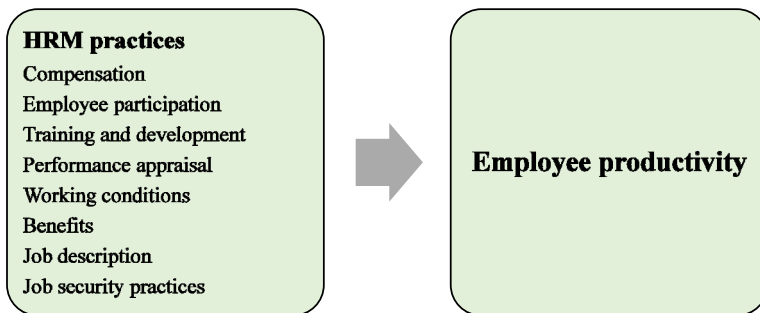
2 HR strategies and COVID-19

At the time of crisis, organisations are likely to be impacted by several disruptions. As a result, employees are the ones who undergo a high level of stress because of several traumatic experiences. In the context of the current pandemic, employees are struggling to maintain their job position as well as social position while taking care of themselves and their families. During such times, employees need to learn to deal with the complex situations and adapt to the new work environment. Therefore, it has become extremely important that human resource department takes care of the wellbeing of its employees to cope up with this situation by providing them emotional and interpersonal support. The quality of human resource, information technology and service quality are important

contributors to the overall performance of the organisation (Kolvereid and Åmo, 2021). In order to manage the current situation effectively, some organisations have introduced remote working alternatives, revision of their HR policies, freezing of hiring and wages etc to keep in pace with these unprecedented times. KPMG has reported that most of the organisations are resorting to two way measures to survive in uncertain business environment, i.e., optimisation of cost and motivation of employees to maintain both organisation and employees' performance and productivity (KPMG, 2020). This pandemic and lockdown have led to an increase in mental stress and anxiety among employees. Therefore, to maintain continuity in business, organisations are also taking care of their employee's emotions related to pandemic so that it does not hamper employee productivity. As per a report of KPMG published in 2020, more than 75% of organisations revised their HR strategies related to employee engagement and communication to make sure that they can achieve maximum involvement of employees during COVID-19 (KPMG, 2020).

Many organisations have developed crisis management teams, task forces, etc. to create awareness related to COVID-19 and the precautionary measures required to be taken. Various training programs for staff members, especially front-line employees were conducted to deal with this situation. Different HR policies related to the health information of employees, regular temperature check-ups, daily screening, etc. were formulated by the HR task force (Emond and Maese, 2020). Human resource department of almost all the companies are primarily taking care of four important tasks: first one is physical health and wellbeing of employees, second is promotion of remote work, and third is follow up on jobs and work continuity issues and fourth is handling of mental health, emotions, family support and resilience which is the need of the hour (Bersin, 2020).

Figure 1 Conceptual framework (see online version for colours)



Hence, we can clearly see that COVID-19 has changed the way of working dramatically at all levels of human resource management. All the HR practices such as recruitment, selection, training and development, etc. need reinvention for the smooth functioning of business. In fact, organisations are trying their best to maintain influential work culture so that the employee productivity is not hampered. Hence, it is essential to understand the impact of current HR practices on productivity of employees in complete remote working environment. Therefore, the objective of the current study is to identify the HR practices that have a greater influence on employee productivity in remote working environment so

that organisations can focus on such practices in the long run and make a clear distinction between motivating and de-motivating HR practices (refer to Figure 1).

3 Literature review and hypotheses development

Economic and social history has pointed out that only after centuries of orthodoxy, the wellbeing of employees has now been recognised as an important responsibility of the organisation (Guest, 2002; Cook et al., 2001). HR function is now increasingly moving towards assuming new roles such as focussing on more organised human capital, relationship management and knowledge facilitation (Lengnick-Hall and Moritz, 2003). Therefore, the majority of the previous studies support the view that there is a relationship between HRM policies and employees performance (Armstrong and Baron, 1998; Guest et al., 2003; Purcell, 2003). On the basis of available literature, HRM practices can be defined as the activities and policies related to human capital which are designed and implemented on a continuous basis to ensure the survival of the organisation (Schuler and Jackson, 1987; Purcell, 2003). In the present times, human resource management focuses more on the humanistic approach, which deals with creating a conducive environment for the employees with emphasis on participation in decision making, teamwork, effective communication, effective training and development of employees, etc. Such practices improve the level of commitment among the employees, thus leading to increased productivity (Guest, 1998). The focus of employers is shifting to more soft and high commitment approaches to empower the employees and develop trust amongst them for the betterment of organisation (Legge, 1989; Whitener, 1997; Collier and Esteban, 2007; Singh et al., 2019). At the present stage, productivity planning is essential for every organisation to sustain and remain competitive in the market. This objective can be achieved only by effective utilisation of workspace and human resources (Jayachitra and Parthasarathy, 2020). There has been an extensive research during the last few decades on finding out the impact of HRM practices on employee productivity. Bartel (1994) showed that training and development programs have a direct link with the productivity of employees. The meta-analysis conducted by Guzzo et al. (1985) established a relationship between training and goal setting and the productivity. There has been consistent demonstration by several researchers about the link between the compensation system adopted by an organisation and the productivity of its employees (Gerhart et al., 1992; Weitzman and Kruse, 1990). Allen et al. (2003) demonstrated that the productivity of an employee is also affected by the opportunity given to him to take decisions related to his own work. Further, Chen and Huang (2009) have argued that performance appraisal motivates an employee which in turn improves his productivity. Apart from the social-psychological factors, physical factors such as the working environment provided by the employer also impacts the productivity of an employee (Allen et al., 2003). Finally, job security also has a directly positive relationship with employee productivity (Singh, 2004)

Over the last few decades, researchers have studied about the efficiency of employees with the provision of work from home (Bailyn, 1988; Koenig et al., 1996). In the context of our research paper, work from home or remote working refers to the provision where an employee performs maximum proportion of his work from a remote area which is separate from the office premises. Researchers have contended that working from home

serves as an additional perk for the employees, which increases their productivity with a high level of motivation. Hamblin (1995) found that remote working has increased the productivity of employees by 20% to 40%. The study was further supported by several researchers who argued that remote workers are likely to showcase better quality work in less time with lower attrition rates (Felstead and Henseske, 2017; Huws, 1993). The effectiveness and adaptability of telework systems is being increasingly recognised with the widespread adoption of the practice due to mandatory lockdown (Fujii, 2020). Keeping in view the situation of current pandemic all across the globe, telework or work from home seems to be the new normal. Further, it is expected to be encouraged in the future also even post COVID-19 due to reduced fear of telework, increased awareness of cost saving opportunities and future disaster preparedness (Lister, 2020). A large number of previous studies have focused on analysing the pros and cons of working from home (Baruch, 2000; Gajendran and Harrison, 2007) and have pointed out the importance of a suitable HRM practices to be followed by the organisation in order to boost the productivity of employees (Kurland and Bailey, 2000). Baker et al. (2007) have suggested that organisational and job-related factors such as training and development, compensation, appraisal, task identity, participation and human and technical support affect the satisfaction level of employees, which in turn influences the productivity of remote workers. Gerdeman (2001) has suggested that training and development of employees, flexible working hours, better communication practices and empowerment of employees influence the overall productivity of an organisation. Several researchers in the past had contended the importance of e-HR in enhancing innovation, information sharing, decision making and ultimately employee productivity (Lengnick-Hall and Moritz, 2003). Therefore, according to the literature, there is little consensus on the inclusion of different HRM practices in the case of remote work environment. Researchers have suggested that a different mix of HRM practices should be adopted depending upon the nature of work and work environment to maximise the commitment of employees (Wood and Albanese, 1995). Due to the current turmoil situation created by COVID-19 crisis, there is an urgent need for the companies to think beyond the traditional HR practices and rewrite the HRM practices to be followed in the situation of lockdown during the current pandemic or any such future emergency. The below discussion will further focus on hypotheses development.

3.1 Compensation and employee productivity

Compensation can be defined as an equitable system of rewards followed by an organisation based upon the skills, abilities and individual contribution of each employee to the firm (Gerhart and Bretz, 1994). Researchers have argued that a compensation system which is based upon the performance of employee leads to increased productivity and decreased absenteeism (Delaney and Huselid, 1996). Since, compensation strategies play an important role in the maintenance of human capital of a company, therefore, there is a positive relationship between compensation and the overall performance of the organisation (Collins and Clark, 2003). The compensation based on the performance of employees has a greater impact on motivation rather than the fixed rewards (Delaney and Huselid, 1996). An effective HRM system aims at integrating performance of the employee and HR strategies so as to positively affect the employee's will to work in the most efficient manner (Wright et al., 2003). Due to the current crisis situation, there have been a number of instances where employees had to bear salary cuts, compulsory unpaid

leaves or complete termination from employment. Therefore, it is essential to identify the impact of compensation plans on employee productivity during the present lockdown situation. Based on the previous research, we predict that employee productivity is positively influenced by fair compensation practices. Therefore, we suggest the following hypothesis:

H1 Compensation has a significant relationship with employee's productivity.

3.2 Employee participation and productivity

Employee participation can be defined as the degree of freedom given to the employees to participate in the decision making activities in order to contribute towards the overall performance of the organisation (Cotton et al., 1988). A large number of researchers have suggested that participation of employees in the decision making process, freedom of action etc. influences the trust of the employees, which in turn has a positive impact on their productivity (Gomez and Rosen, 2001). Further, the involvement of employees in decision making creates a positive impact on the employee's ownership and commitment such that the employees feel more connected towards the organisation and are motivated to work with their maximum capabilities. The participation of employees in decision making also reduces the gap between the supervisor and the subordinates, which encourages team work and saves time for decision making and reduces the chances of conflict (Nykodym et al., 1994). Since, the world is taking a shift in this pandemic situation, the need for employee involvement has increased manifold so as to build a collaborative workforce for better success and growth. The following hypothesis is proposed:

H2 Participation has a significant relationship with employee productivity.

3.3 Training and development and employee productivity

Training and development refers to the methods used to impart skills and capabilities to both new as well existing employees at regular intervals to make a transition in their attitude to enable them to perform their jobs more efficiently (Herold and Fedor, 2003). It has been contended that investment in training and development of employees can be regarded as an investment in the human assets of the organisation, which leads to a positive impact on employability (Waterman, 1994). Training and development of employees is an essential component of HRM practices as it enables employees to develop knowledge and skills which would enable them to accomplish their objectives effectively, thereby making a positive contribution to the overall growth of the organisation (Armstrong and Taylor, 2006). Since, training inculcates additional competencies in the employees required in the near future, it is considered as one of the most effective ways to increase the productivity of employees (Cook and Hunsaker, 2001; Jackson and Schuler, 2000). Also, keeping in view the current situation where more than three-fourths of the workforce is working from home, it is important for the firms to provide advanced training to their employees so that they can succeed in the remote environment. Thus, the following hypothesis is suggested:

H3 Training and development has a significant relationship with employee productivity.

3.4 Performance appraisal and employee productivity

Performance appraisal is defined as a systematic evaluation of the performance of employees in their assigned tasks and establishment of a plan for improvement (Byars and Rue, 2004). Performance evaluation at regular intervals motivates the employees to work harder towards their goals and also increases their self-esteem, which in turn improves their productivity (Singh, 2004; Sookdeo, 2019). Wan et al. (2002) suggested that performance appraisal based on the merit of employees has a positive impact on motivation and commitment, which in turn increases the organisational performance. However, ineffective system of performance appraisal in an organisation can lead to several undesirable problems such as lower level of employee morale which decreases the productivity of individual employees thus leading to decreased organisational performance (Osman et al., 2011). In the present times of lockdown when majorly all the employees are working from home, a performance management system is very crucial to bridge the communication gap and providing a clear statement of expectations and regular feedbacks so as to maintain the same levels of productivity. Therefore, the following hypothesis is suggested:

H4 Performance appraisal has a significant relationship with employee productivity.

3.5 Working conditions and employee productivity

Working conditions refer to the physical and theoretical constructions to provide a superior working environment to the employees in terms of health, safety, security, technology, etc. (Kahya, 2007). Workplace environment creates a huge impact on employees' performance. Several researchers have pointed out that a better physical environment and availability of all the necessary resources boosts the morale of employees, which ultimately leads to improvement in their productivity (Carnevale and Pruitt, 1992). However, as a result of remote working environment due to lockdown imposed in almost all the countries in the world, the factors of work environment have changed with more emphasis on information technology and related resources and safety measures. It is, therefore, important to identify the impact of working facilities being provided in the remote working environment on the employees' performance. The following hypothesis is proposed:

H5 Working condition has a significant relationship with employee productivity.

3.6 Benefits and employee productivity

Benefits can be defined as the perks provided to the employees in addition to their salary component such as mediclaim, child allowance, insurance, etc. (Harris and Fink, 1994). It has been argued by researchers that indirect compensation and benefits play an important role in reducing the turnover in an organisation (Dulebohn et al., 2009). It has been pointed out that the employers strategies related to benefit offerings have an impact on employee benefit satisfaction which in turn positively affects the attitudes and behaviours of the employees (Harris and Fink, 1994). In times of current crisis due to the outbreak of COVID-19, it has been found that several companies are contributing towards the wellbeing of their employees so that they can overcome their stress during the present times. Many companies have improved the healthcare benefits and have broadened their

focus on wellbeing programs (Faulds and Raju, 2021). Therefore, it has become crucial to identify the impact of employee benefits on their productivity. The following hypothesis is proposed:

H6 Benefits have a direct relationship with employee productivity.

3.7 Job description and employee productivity

Job description is defined as the duties, tasks and responsibilities that are required to be performed by various employees of an organisation (Amin et al., 2014). It has been suggested that clearly defined job responsibilities reduces the probability of absenteeism and also contributes in hiring the right person for the right place. Therefore, if the employees are clear about their duties and responsibilities, they are expected to work with their maximum capabilities, thus leading to maximisation of their productivities (Wertz and Bryant, 2000). Later, job description is also used as a basis for assessment of the performance of the employees. Therefore, we assume based on the literature that a proper job description has a significantly positive relationship with employee productivity and it is very important to check the levels of clarity the employees have regarding the tasks they are expected to perform while working from home. Therefore, the following hypothesis is proposed:

H7 Job description has a direct relationship with employee productivity.

3.8 Job security practices and employee productivity

Job security is defined as the affirmation that the job of an employee would be continued inspite of distressed economic conditions (James, 2012). Job security has become extremely important during the current crisis situation in countries all over the world. It is only when the employees have a job security that they are able to work in the most efficient manner. It has been observed in several industries that employees work hard to perform their job better if they receive greater employment security and therefore, researchers view that employment security is an essential factor to lead to improvement in the productivity of employees (Rawabdeh and Nawafleh, 2019). Therefore, the following hypothesis is proposed:

H8 Job security practices have a direct relationship with employee productivity.

4 Research methodology

As has been mentioned earlier, HRM practices play an important role in improving the productivity of employees, therefore, it is important for the organisations to adapt their HR policies to the changes in the micro and macro environment. Taking into consideration the current pandemic situation and frequent lockdowns being imposed in different parts of the globe, the current study intending to evaluate the relationship between HRM practices and employee productivity for work from home during lockdown is justified.

The current paper is based on a causal study wherein the impact of independent variables is analysed on the dependent variables. For this study, primary data was

collected using a self-administered questionnaire from salaried working professionals who were working from home during the lockdown imposed by the Central Government due to the COVID-19 pandemic. The data was collected using snowball sampling which is a non-probability sampling technique. The sample was collected and analysed using PLS-SEM method. The questionnaire was developed based on an extensive review of literature which pointed out that job description, training and development, performance appraisal, compensation benefits, working conditions, information sharing and communication, job security, equal opportunity/participation, etc. are the various human resource practices that influence employee productivity. To achieve the objectives of our research, the following pre-validated scales have been adapted for each of the HRM practices:

- job description (Qureshi et al., 2010)
- training and development (Edgar and Geare, 2005)
- performance appraisal (Singh, 2004)
- compensation (Qureshi et al., 2010)
- benefits (Lucero and Allen, 1994)
- working conditions (Edgar and Geare, 2005)
- Information sharing and communication (Gould-William and Davies, 2005) and (Fitz-Enz, 1997)
- job security (Tsai, 2006)
- equal opportunity/participation (Steel and Mento, 1987).

Considering all the practices together, a 41-item questionnaire was developed to measure the human resource practices followed by organisations. Productivity has been measured subjectively in terms of employee's own perceptions regarding their productivity. A six-item Stanford's Presentism scale which was developed by Koopman et al. (2002), was modified to measure the employee productivity.

5 Results and findings

Out of 500 questionnaires distributed to the working professionals, 363 completed questionnaires were collected. The total sample consisted of responses from 165 females and 198 males whose age group ranges from 20 to 50 years. The respondents who were majorly knowledge workers belonged to diverse industries like accounting, broadcasting, education, banking and finance, insurance, hospitality, IT and ITES, e-commerce, transportation, legal services, government departments and public administration etc. Table 1 gives a brief description of the respondents' profile.

5.1 Exploratory factor analysis

To understand the applicability of the human resource practices and establish reliability and validity, the questionnaire was subjected to exploratory factor analysis. The principal

component factor analysis with varimax rotation approach was used. The rotated component matrix resulted in seven factors with factor loadings ranging from 0.562 to 0.861 (refer to Table 2). Two factors namely information sharing and communication were dropped on account of low loading. In addition, Cronbach alpha for each factor was ranging from 0.913 to 0.961 for job description, training and development, performance-based compensation, competence-based compensation, employee welfare, job security and equal opportunity/participation. Further, questionnaire items related to employee productivity loaded to two different factors namely work completion and preventing distractions (refer to Table 3) with Cronbach alpha values of 0.805 and 0.873 resp.

Table 1 Respondent profile

<i>Gender</i>	<i>Male</i>		<i>Female</i>
	198		165
<i>Age group</i>	<i>20–30 years</i>	<i>30–40 years</i>	<i>40–50 years</i>
	144	195	24
<i>Education</i>	<i>Graduation</i>	<i>Post-graduation</i>	<i>Professional degree</i>
	108	141	114

Table 2 Rotated component matrix for human resource practices

<i>Rotated component matrix</i>							
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
TD1							
TD2							
TD3					0.774		
TD4					0.684		
TD5					0.562		
TD6					0.819		
TD7					0.777		
EOP1				0.618			
EOP2				0.749			
EOP3				0.702			
EOP4				0.692			
EOP5				0.656			
WC1							
WC2							0.599
WC3		0.719					
WC4		0.569					
WC5		0.690					
PA1	0.605						
PA2	0.804						

Notes: Extraction method: principal component analysis.
 Rotation method: Varimax with Kaiser normalisation.
 Rotation converged in 12 iterations.

Table 2 Rotated component matrix for human resource practices (continued)

<i>Rotated component matrix</i>							
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
PA3	0.664						
PA4	0.746						
PA5	0.700						
ISC1							
ISC2							
BE1		0.822					
BE2		0.861					
BE3		0.677					
BE4							0.646
CM1							0.612
CM2	0.577						
CM3	0.628						
CM4	0.796						
CM5	0.635						
JD1			0.780				
JD2			0.636				
JD3			0.787				
JD4							
JD5			0.697				
JS1						0.635	
JS2						0.828	
JS3						0.791	

Notes: Extraction method: principal component analysis.
 Rotation method: Varimax with Kaiser normalisation.
 Rotation converged in 12 iterations.

Table 3 Rotated component matrix of employee productivity

<i>Rotated component matrix</i>		
	<i>1</i>	<i>2</i>
EP1	0.786	
EP2	0.732	
EP3	0.717	
EP4		0.710
EP5		0.725
EP6		0.785

Notes: Extraction method: principal component analysis.
 Rotation method: Varimax with Kaiser normalisation.
 Rotation converged in eight iterations.

5.2 Structural equation modelling

For data analysis, the partial least square-structure equation model (PLS-SEM) was conducted using Smart PLS Software Version 3.3.2. PLS-SEM has been recognised as an effective tool by many researchers and practitioners in the past decade. The unique set of algorithms that provides the researchers with the overall evaluation of the model and the impact of independent variables on dependent variables make it even more powerful and user-friendly. It provides with the overall model fit indices and can be run on a smaller sample (Hair et al., 2014; Goodhue et al., 2012). This makes it even more attractive among social science researchers (Keil et al., 2000).

While conducting PLS-SEM, the data is analysed in two phases. In the first phase, the measurement model has been assessed for its validity and reliability. The second phase evaluates the overall path model and analyse the hypothesised relationships among the independent and dependent variables.

5.2.1 Measurement model assessment

The measurement model describes the relationship between the constructs and their indicators. Reliability, discriminant validity and convergent validity should be established for the assessment of measurement model (Hair et al., 2017).

5.2.1.1 Internal consistency reliability

To establish internal consistency, individual factor reliability is to be assessed. The loadings of the items to their respective latent variables are analysed for establishing reliability. The higher shared variance between the construct and its items implies higher loadings (Hulland, 1999). The Cronbach's (1951) alpha is a measure to assess the construct reliability. Apart from construct reliability measured by Cronbach alpha, the internal consistency is established through composite reliability (Fornell et al., 1981). Measuring composite reliability is considered more effective than the construct reliability because it uses the item loadings obtained within the nomological network (Hair et al., 2014). The acceptable range of Cronbach alpha score for construct reliability is 0.70 (Hair et al., 2014) and for composite reliability is also 0.70 (Fornell et al., 1981). In this study, the reliability coefficients are above the acceptable standards as shown in Table 4.

Table 4 Internal consistency measures

<i>Variable</i>	<i>Cronbach alpha</i>	<i>Composite reliability</i>
Job description	0.942	0.958
Training and development	0.913	0.936
Performance-based compensation	0.957	0.963
Competence-based compensation	0.922	0.962
Job security	0.928	0.954
Equal employee opportunity	0.945	0.958
Employee welfare	0.961	0.969
Work completion	0.805	0.885
Preventing distraction	0.873	0.918

5.2.1.2 Convergent validity

The convergent validity can be established by examining the average variance extracted for each construct. Convergent validity is the degree of agreement in all the items of the same construct (Carmines and Zeller, 1979). According to Fornell et al. (1981), to establish convergent validity, the measures of the construct should have an average variance extracted above 0.50. The analysis of data collected for this study depicts that the average variance extracted for all the variables is above 0.50, as shown in Table 5.

Table 5 Convergent validity measure

<i>Latent constructs</i>	<i>Items</i>	<i>Loadings</i>	<i>Average variance extracted</i>
Job description	JD1	0.925	0.851
	JD2	0.938	
	JD3	0.904	
	JD5	0.923	
Training and development	TD3	0.887	0.746
	TD4	0.896	
	TD5	0.736	
	TD6	0.917	
	TD7	0.869	
Performance-based compensation	PA1	0.873	0.744
	PA2	0.831	
	PA3	0.918	
	PA4	0.842	
	PA5	0.881	
	CM2	0.872	
	CM3	0.867	
	CM4	0.833	
	CM5	0.843	
Competence-based compensation	BE4	0.967	0.927
	CM1	0.959	
Job security	JS1	0.921	0.874
	JS2	0.937	
	JS3	0.947	
Equal employee opportunity	EOP1	0.886	0.821
	EOP2	0.935	
	EOP3	0.913	
	EOP4	0.886	
	EOP5	0.908	
Employee welfare	BE1	0.941	0.838
	BE2	0.889	
	BE3	0.920	

Table 5 Convergent validity measure (continued)

<i>Latent constructs</i>	<i>Items</i>	<i>Loadings</i>	<i>Average variance extracted</i>
Employee welfare	WC3	0.910	0.838
	WC4	0.895	
	WC5	0.937	
Work completion	EP1	0.818	0.720
	EP2	0.901	
	EP3	0.825	
Preventing distraction	EP4	0.914	0.788
	EP5	0.862	
	EP6	0.886	

5.2.1.3 Discriminant validity

Discriminant validity refers to the degree to which one constructs differs from other constructs taken for the study (Carmines and Zeller, 1979). To establish discriminant validity, a pairwise correlation of the constructs is to be calculated and compared with the estimates of variance extracted for each of the construct (Fornell et al., 1981). Discriminant validity can be achieved when convergent validity has been established. This means that when the average variance extracted of each construct is above 0.50, then it can be rightly concluded that more than 50% of the measurement variance has been explained by the construct (Chin, 1998). Also, the diagonal values in the discriminant validity table should be greater than the non-diagonal values in the corresponding rows and columns. In the discriminant validity table, the diagonal values correspond to the square root of average variance extracted for each of the constructs, while the non-diagonal values are the pairwise correlations among the constructs. Table 6 shows that there is discriminant validity among the constructs taken into consideration for this study.

Table 6 Discriminant validity measure

	<i>JD</i>	<i>TD</i>	<i>PbC</i>	<i>CbC</i>	<i>JS</i>	<i>EOP</i>	<i>EW</i>	<i>WrC</i>	<i>PD</i>
JD	0.923								
TD	0.669	0.863							
PbC	0.785	0.735	0.863						
CbC	0.560	0.616	0.737	0.963					
JS	0.612	0.622	0.606	0.449	0.935				
EOP	0.728	0.711	0.706	0.544	0.706	0.906			
EW	0.639	0.774	0.771	0.636	0.76	0.688	0.916		
WrC	0.542	0.535	0.562	0.469	0.483	0.517	0.491	0.849	
PD	-0.083	-0.107	-0.012	0.057	-0.127	-0.079	-0.077	-0.086	0.888

5.2.2 Structural model assessment

The structural model describes the relationship between the latent constructs themselves (Hair et al., 2017). To measure the structural model, measures such as collinearity (VIF value), hypothesis testing and coefficient of determination (R-square), etc. have been suggested. To assess the structural model, firstly, multicollinearity of all the constructs was assessed. Hair et al. (2014) suggested that the presence of multicollinearity can lead to an increased probability of type II errors. The VIF values were ranging from 1.598 to 4.578, well below the threshold of 0.5 (Hair et al., 2017), thus indicating no issue of multicollinearity among the predictor constructs.

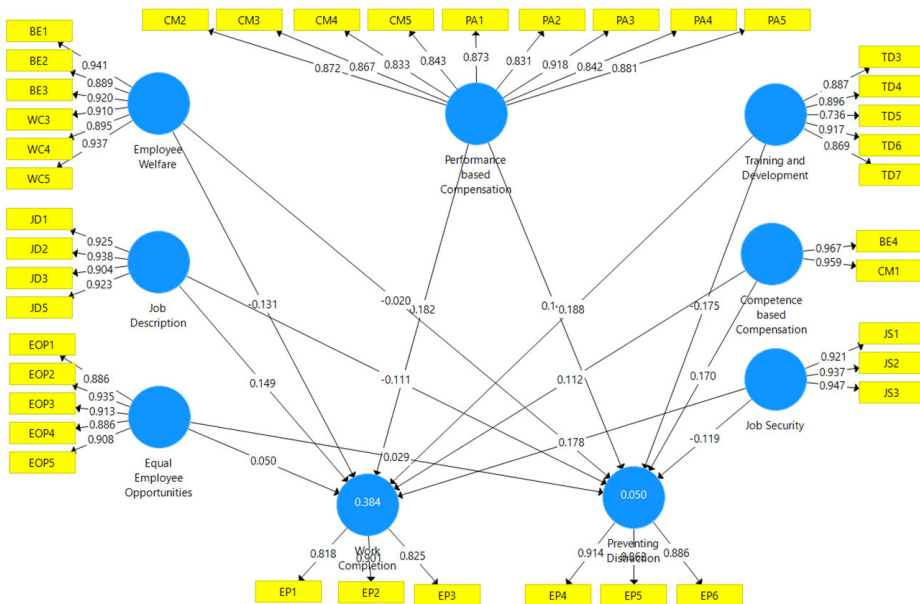
Table 7 R-square and adjusted R-square

	<i>R-square</i>	<i>R-square adjusted</i>
Work completion	0.384	0.372
Preventing distraction	0.050	0.032

Table 8 Path coefficients

	<i>Work completion</i>	<i>Preventing distraction</i>
Job description	0.149	-0.111
Training and development	0.188	-0.175
Performance-based compensation	0.182	0.147
Competence-based compensation	0.112	0.170
Job security	0.178	-0.119
Equal-employee opportunity	0.050	0.029
Employee welfare	-0.131	-0.020

Figure 2 Path coefficient results (see online version for colours)



The R-square values determine the predictive ability of the structural model. It is evident from Table 7 that the model has moderate to low predictive power for the dependent variables, i.e., work completion and preventing distraction with R-square values of 0.384 and 0.050 resp. It is evident from Table 8 and Figure 2 that all human resource practices taken into consideration for this study except Employee welfare had a significant positive impact on the maintenance and enhancement of employee productivity.

6 Contribution of the study

Human Resource has always been an inevitable function of management. One of the most important factors of production, is man which is the human resource (out of man, machinery, material and money). It is because this factor will use all the other factors judiciously and efficiently such that maximum output can be derived from the given input. Therefore, it is essential for organisations to devise effective human resource management practices to bring out the best of their talent and support the growth of the organisation. The psychology of human resource is very unique. The uniqueness is that when they are taken care of, they will work harder and eventually their productivity increases but if they are neglected, there is a tendency to just work to fulfil the necessities of the organisation. So, to enjoy a competitive advantage in the market and reach new heights, it is essential to understand the needs of the employees at different times and device such human resource policies which helps to keep the employees motivated towards their work and enhance their productivity. This research was intended to understand the impact of different human resources management practices on the employee productivity during the COVID-19 pandemic.

The results of our study pointed out that human resource practices relating to job description, training and development, job security, equal opportunity, performance-linked compensation and competence linked compensation all together had a significant positive effect on the maintenance and enhancement of the employee productivity as employees worked hard to complete their assigned tasks during the period of lockdown. The only factor that negatively impacted productivity was employee welfare. This is probably because organisations had withdrawn most of the benefits and welfare schemes during lockdown, therefore, this became an important factor hampering the productivity of the employees. The path coefficient values in our analysis clearly pointed out that HRM practices such as job description, training and development, job security and employee welfare negatively impacted the productivity as the employees working from home were being distracted by a number of factors like lack of concentration due to noise, online classes of children, increased workload owing to non-availability of maids, network issues, etc. Whereas practices such as performance-based compensation, competence-based compensation and equal employee opportunities had a positive contribution in preventing the distraction of employees and constantly motivating them to work towards their goals and objectives, thereby enhancing their productivity. This means that while the employees were working from home during the COVID-19 pandemic they were motivated to achieve their targets and ultimate goals as the organisations were compensating their employees even if they are working from home and their distractions like fatigue, tiredness, time spent on the road travelling to office and back were all prevented. On the other hand, several factors such as

organisations laying off their employees and lack of development and welfare from the organisation led to stress and anxiety which negatively hampered the mental health and ultimately employee productivity.

It is expected that although the organisations would continue to provide their support to employees in the form of various human resources policies, but it is significant to understand the factors affecting the level of employee productivity. In the context of the present study, employee productivity was measured through two dimensions, that is, work completion and preventing distractions. In this unprecedented situation where employees are working from home, the employees focussed on completing the tasks assigned to them in time while they were being distracted by a number of factors. The HRM practices like job description, training and development, employee welfare and job security could not motivate the employees enough to prevent them from distracting. It is evident that organisations need to devise such practices which can reduce the anxiety in the minds of the employees to enhance their productivity.

7 Implications

The current pandemic situation has a long-lasting impact on us at various levels ranging from individual to global. In such an environment, it is very important for the employers to handle the situation in a tactful manner so that their organisations can survive during and after this crisis. Kohls (2020) has contended that the way employer treats its employees during such situations will be remembered for years to come. During the time of current crisis, it is very important that the leaders of the organisations have a regular interaction with their employees to address their concerns and motivate them and support them which would help the employees to ease their stress and motivate them to remain committed to the organisation (Al-Ghusin and Al-Ajlouni, 2020). The pandemic is affecting both the personal and professional lives of people around the world and therefore, it is very important that organisations update their employees on safety measures and other important events and happenings which may impact their work environment. Not only this, but the employers must also share their mission and strategies to deal with this situation. This will not only give the employees a sense of involvement but will also motivate them to reduce the distractions and work in the most efficient manner. Further, top level management must be committed to adopting TQM practices for the growth of organisational performance (Kalu et al., 2021; Sundar and Prabhu, 2019). Moreover, no particular HR strategy can be fit for all situations and therefore, employers must make efforts to incorporate a flexible and adaptive mindset in the work environment. Also, it is very important that the organisations develop the necessary infrastructure to promote healthy communication, participative decision making and strategic planning for current and future growth. It is imperative to develop optimal technological and infrastructural solutions for employees by integrating internal and external ICT tools and shifting to online meetings, video conferencing, remote collaboration spaces, virtual whiteboards, big data analytics, etc. (Williams and Schubert, 2018). Further, the application of smart technologies in the work environment is imperative, taking into consideration the transformation of traditional workplaces in order

to accommodate the dynamic lifestyles (Attaran et al., 2019). A digital workplace environment would give an opportunity to employees to improve the quality of communication and engagement, thus leading to increased output and overall efficiency (Köffer, 2015). Smart technologies would enable the organisations to keep track of the satisfaction and productivity level of employees (Burnett and Lisk, 2019) by developing objective indicators of performance. Since, some employees faced a lot of difficulty in coping with the workplace shift to more based on technology. It is important to provide training on the effective use of ICT tools so as to reduce the level of fear among the employees due to technical failures. According to a survey report of 2,700 employees, 75% of the respondents reported an increased level of anxiety since the outbreak of pandemic (Smith, 2020a). In such critical times, HR leaders must confront with the situation in a way that both the safety and well-being of employees is taken care of (Wright and Essman, 2019). Therefore, HR managers must look for opportunities to use social groups and social channels to reduce the sense of social isolation among the employees. Further, social channels could be used as a medium to provide technological support in case of remote work environment (Toscano and Zappalà, 2020). In order to keep up the safety of employees, it is important to address all their concerns by providing them complete information about the steps being taken to prevent the spread of virus within the workplace (Toscano and Zappalà, 2020). Commitment of top organisation towards the safety and well-being of employees, continuous improvements in the functional areas of the organisation and proper training and development will improve the productivity of employees in work from home environment. With the announcement of nationwide lockdowns, the organisations had to resort to work from home to avoid interruption and maintain continuity of work. However, the trend of work from home is likely to continue even after COVID-19 especially in places with high population density or high real estate cost (Faulds and Raju, 2021). Millennials are more loyal to companies who offer a higher degree of flexibility and autonomy in the workplace needs (Sale and Jones, 2019). Fujii (2020) opined that there is a positive relationship between telework and motivation and productivity level of employees belonging to Millennial and Gen Z. Since, the workplace is going to be largely occupied by members of such cohort very soon, it is important to successfully implement teleworking programs to keep the employees engaged and motivated.

8 Limitations of the study and direction for future research

One of the major limitations of this study is that it is based on non-probability sampling technique because the study was conducted during the lockdown situation only and the researchers could not visit corporates offices personally. Further, the sample size is also relatively low. Therefore, the findings should be generalised with utmost care. Further, the scale construction is based entirely on literature review. So, future studies can explore additional and more advanced HRM practices prominent at the time of research. Future studies can also test the relationship between HRM practices and employee productivity with stress during any future crisis as a mediating variable.

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