The influence of COVID-19 on employee ergonomics and employee engagement of banking employees

The influence of COVID-19 on bank employees

13

Received 30 December 2021 Revised 18 February 2022 Accepted 30 March 2022

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Abstract

Purpose – The paper aims to provide insights into the influence of COVID-19 on employee engagement and ergonomics in the banking sector. The purpose of this study is understood from the perspective of impact of the pandemic on banking employees.

Design/methodology/approach – Data for the study are collected from the employees working in the banking sector of India. The study applied the partial least squares (PLS) method of analysis to understand the relationship between employee engagement and ergonomics in the banking sector.

Findings – The findings of the study suggest results with regards to change in the perception of the employees in the bank and its influence on the work ergonomics due to pandemic. The findings indicate that banks need to develop measures and strategies for improving employee engagement programs and work ergonomics at banks.

Research limitations/implications – The study is confined to the banking employees working in a specific region. Therefore, future research could focus more on the influence of Covid-19 on the organizational culture of the banking system and provide insight into this direction of research.

Practical implications – This study provides directions for human resource management for developing effective practices for improving the performance of the employees in the banking sector.

Social implications – This study offers support to the banking sector by providing insights into how it can improve the working environment and, thereby, enhance working in the banking sector.

Originality/value – This is the study that attempts to provide insights into how ergonomics is important for working in the banking sector, especially during a pandemic. The findings provide important implications for the banking sector and improve work ergonomics.

Keywords Employee engagement, Ergonomics, Banking sector, COVID-19 **Paper type** Research paper

Introduction

The concept of ergonomics is associated with the occupational health and safety of employees (Dul and Neumann, 2009). Ergonomics plays an important role in the performance of the employees in the organization; hence, organizations need to develop the right ergonomic tools and techniques for effective performance on the job (Law *et al.*, 2011).

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Management Matters Vol. 19 No. 1, 2022 pp. 13-29 Emerald Publishing Limited e-ISSN: 2752-8359 p-ISSN: 2279-0157 DOI 10.1108/MANM-12-2021-0009 Employee engagement is an emerging concept in the domain of work ergonomics of the organization (Iqbal *et al.*, 2017). Employee engagement is also associated with the health and safety climate at the workplace (Law *et al.*, 2011; Uddin *et al.*, 2019).

The work ergonomics in the organizations have changed due to COVID-19 (Chanana and Sangeeta, 2020). The situation of COVID-19, which is termed as the pandemic, has influenced various human resource management practices, especially work ergonomics, which has become one of the most challenging factors for organizations (Risley, 2020).

This pandemic situation has changed the work setting thereby changing the workspace in the offices. The pandemic situation has promoted employees to adopt online work and operations through the home. These changes have influenced the ergonomics and operational activities in organizations (Chanana and Sangeeta, 2020). Apart from ergonomics, other factors are associated with ergonomics, such as work hazards, work contents and psychological factors, and these factors also influence the employees (Uddin et al., 2019).

The study conducted by Junkin (2020) mentions that organizations were not prepared for the changed situation due to COVID-19, and most of the organizations have undertaken measures for the COVID-19 scenario. Organizations have developed sustainable ergonomics policies and strategies for improving employees' ergonomics due to COVID-19 (Uddin et al., 2019).

In the same vein, the study conducted by Ren et al. (2020) mentions that employees working in the banking sector have shown great courage and ensured financial transactions during the COVID-19. In the context of pandemic situations, banking employees' ergonomics played an important role by applying measures such as social distancing, sanitation, wearing of masks, exploring the digital option of banking operation, etc. (Arora and Suri, 2020).

Further, the study conducted by Chanana and Sangeeta (2020) mentions that employee engagement is one of the most important tools for human resource managers and practitioners to engage employees with the changed work situations during a pandemic.

One of the objectives of ergonomic design is to optimize work, avoid adverse effects on the worker's health and contribute to the productivity and efficiency of the organization (Lager *et al.*, 2021). When we mention occupational risks, the main one that has been detected is the ergonomic risk related to the use of information and communication technologies, where employees are spending long hours on these technologies (Sasangohar *et al.*, 2020).

Additionally, a study indicated that digital technology application in the work also influences the work ergonomics and employee engagement, as the employee working for long hours with the digital technology has an impact on the health and well-being of the employees (Salmon *et al.*, 2021).

The study related to the banking sector indicates that the employees' work ergonomics has changed significantly and thereby there was a change in the engagement strategy for the banking firms (Prajapati and Pandey, 2020). Therefore, it is worth understanding the ergonomics and employee engagement from the perspective of the banking employees.

Hence, considering the above discussion, the present study aims to understand the following aspects: *first*, the perception of the banking employees towards the work during a pandemic; *second*, to understand the factors influencing employees working in banking sectors during the pandemic and *third*, the effectiveness of employee engagement programs on ergonomics during COVID-19 in the banking sector.

To understand the relationship between the ergonomics and employee engagement in the pandemic scenario, the study is presented with the following sections: (1) Literature review, (2) Conceptual model and hypotheses, (3) Research design, (4) Results, (5) Theoretical contribution, (6) Managerial contribution and (7) Conclusion.

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Literature review

Turbulent times such as war, famine, floods, earthquakes and the pandemic, such as COVID-19, influenced the most on the business and employees (Andrew and Sofian, 2012). Holding employees engaged during the pandemic with the right ergonomics is an important factor for maintaining the performance of the organization (Andrew and Saudah, 2012).

Employee engagement and ergonomics can be used as mediators to develop the right attitude and behavior of employees to improve work performance (Chanana and Sangeeta, 2020). The present literature review is focused on the banking sector as they provided service to the organizations and individuals during the COVID-19 pandemic. The literature review also provides insights into the banking sector and research gaps with regards to ergonomics, engagement, work and hazards on the job.

Banking sector and COVID-19

Banks are an important player in the economy and support the growth of the economy, as banks support financial transactions in both internal and international transactions (Korzeb and Niedziółka, 2020).

COVID-19 has influenced the banking sector and has also impacted the banking performance, the factor influencing the banking sector include both financial and non-financial (Berger and Demirguc, 2021).

The financial impact on the banks includes nonperforming loans and write-offs and large applications of digital technology (Elnahass *et al.*, 2021). The nonfinancial factors include the impact on customer service, bank employees' performance, safety and health (Elnahass *et al.*, 2021).

From the perspective of employees working in the banking sector, COVID-19 has changed their work ergonomics as employees in the banks have to maintain social distance, wear a mask and have to protect from the pandemic hazards while providing service to customers at the bank. These changes in ergonomics have impacted employees as they are experiencing physical and psychological health challenges (Anderson *et al.*, 2020).

Further human resource practices with regards to bank employees changed due to the pandemic were the safety of the employees become paramount important to the banks (Agarwal *et al.*, 2020). Additionally, the human resource strategy for employee skill development also changed by adopting online training sessions to manage stress and training on improving customer satisfaction through online banking (Snehal and Pratibha, 2020).

Pandemic and employee challenges in the banking sector

The pandemic has influenced the lives of the people and livelihoods, and the banking sector is no exception. As a result of the pandemic, human resource practices in banking sectors have changed in three ways: first, the structures of the banking organization have changed from a hierarchical structure to agile structures, wherein the employees are delegated with more autonomy and are more flexibility at the workplace. Second, there is a shift in the talent from surplus to shortage to support service to the customers. Third, aggressive training programs are undertaken by the banks to reskill the employees with new technology to support the needs of the customers (Kanitkar, 2020; Nemteanu and Dabija, 2021).

These changes in the banking sector have challenged the work environment in the banks. The challenges influencing the employees working in the banking sector due to the pandemic are as follows: (1) upskilling the employees based on the changed situation needs right strategy and infrastructure to prepare the workforce to work in the pandemic scenario, (2) workforce are from all the age groups, hence providing the right infrastructure and

ergonomics needs accurate planning and investment for changed ergonomics, (3) the pandemic has influenced the organizational culture, hence preparing employees to the changed culture needs the intervention of right change management strategy and (4) employee engagement programs in the banks have been changed due to the pandemic (Haapio *et al.*, 2021; Rudolph *et al.*, 2021; Arora and Suri, 2020).

The discussion indicates that the banking workforce is experiencing unprecedented workforce disruption due to the pandemic; hence, banking companies are developing measures and strategies to cope with this new challenge in the banking sector.

Influence of COVID-19 on employee engagement and ergonomics in the banking sector Work structure in organizations has changed due to the pandemic, and the same applies to the banking sector (Sarkar et al., 2020). The changed work structure includes (1) rise in the hybrid workforce (2) balancing data intelligence with data privacy (3) individualizing the employee experience and (4) alineling from the business world to business imperative (Sarkar et al., 2020).

These changes influence the engagement programs for the employees in the organization (Gaur, 2020). Further with the change in the employee engagement programs, work ergonomics is also influenced at the workplace (Oakman et al., 2022).

The study conducted by Rehman *et al.* (2021) mentions that the service industry has reconfigured the employee workspace to maintain the health and safety of the workforce, and the banking sector is no exception and has developed measures to upgrade the ergonomics due to pandemic.

The study by Gaur (2020) showed that ergonomics has influenced employee engagement in the banking sector of India. The change includes the application of online training, technology-driven work and working in virtual teams (Afroz and Haque, 2021).

Further, a study on employee engagement indicates that changed engagement programs have influenced the organizational culture in the organizations, and the same is related to the banking sector (Ghaffari *et al.*, 2021).

Additionally, employee engagement programs have a direct relationship with ergonomics at the workplace (Mishra *et al.*, 2021), the reason being the changed engagement programs need the right infrastructure for the implementation of changed ergonomics in the organization (Ghaffari *et al.*, 2021).

The above discussion indicates that COVID-19 has influenced employee engagement and ergonomics in the organization. Therefore, studies are needed from the perspective of employee engagement and ergonomics among the banking employees for deeper understanding of the perspective of employees (Mishra *et al.*, 2021).

The discussion with regards to the above studies provides three research gaps: first, the pandemic has changed the human resource practices in the banking sector; hence, there is a change in the perception of the employees towards the work. Second, employees working in the banking sector are facing unprecedented disruption due to the pandemic; hence, the factors influencing the workplace in the banking sector have changed due to the pandemic. Third, research directions are needed to understand the employee engagement program on work ergonomics in the banking sector.

Conceptual model for the study and hypothesis development

In this section of the study, studies related to the role of ergonomics in the banking sector and employee engagement in the banking sector are presented in this section. Further, this section also indicates the influence of COVID-19 on ergonomics and employee engagement in banking sector. Finally, in this section, hypotheses for the study are framed, and development of the conceptual model is presented in the section.

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Ergonomics in the banking sector

The banking sector is one of the demanding sectors where employees in the bank are working at a higher level of risk due to the pandemic (Falahat *et al.*, 2019). Design of workstation and giving right ergonomics is an important aspect for effective performance on the job (Suhel *et al.*, 2020). Apart from the impact of the design of the workstation, the right ergonomics also has an impact on the health of the employee (Arefin and Islam, 2019).

Additionally, the changed situation due to the pandemic has created an uncertain situation among the employees. The factors associated with these uncertain situations in the banking sector are working for long hours on the digital platform of banking, a higher level of dependence on technology and fear of COVID-19 while working offline in the banks (Mishra *et al.*, 2020).

These changes have influenced the office ergonomics in banks. Further, due to the change in ergonomics, the performance of the employees has also influenced the job. The changed factors due to pandemic are changed communication patterns with higher authorities and coworkers, and another factor that changed is the working conditions and working in a team (Prasad *et al.*, 2020).

Hence, these changes in the work situation demand understanding from the perceptive of bank employees towards ergonomics and working in the banks.

Employee engagement in the banking sector

Employee engagement is a mental and emotional connection between the employees' feeling towards the work and organization; this connection with the organization can be either strong or weak based on the employees' perceptions towards the organization (Aktar and Pangil, 2018).

The concept of employee engagement is important for the employees and making the business successful, as highly successful organizations have a highly engaged workforce (Aktar and Pangil, 2018).

In the context of the banking sector, employee engagement was a challenge to the banking sector before the pandemic, and after the outbreak of the pandemic, the challenge with regards to banking employees has become bigger (Yogesh *et al.*, 2020). These changes in the banks are putting pressure on the human resources professionals in managing employees at job (Rastogi, 2020).

The changes in the banking industry include a change in the business models due to the pandemic, and this influences the engagement programs in the banks. Second, this disruption has increased the application of real-time data and understanding employees' needs on regular basis to hold the morale and motivation during a pandemic. Third, the level of reskilling required by the employees for the new role is due to the pandemic (Cooke *et al.*, 2019).

Employee engagement is the variable that human resource practitioners focus on unleashing employees' knowledge, skills and capabilities through effective tools and techniques of employee engagement (Aktar and Pangil, 2018). Hence, these changes demand an understanding of employee engagement from the perceptive of banking industry employees.

Hypotheses for the study

The pandemic situation has put a lot of pressure on the banking sector to provide service to the industry and individual customers. The bank employee is subjected to this situation wherein they have to provide service to customers (Yogesh *et al.*, 2020). The situation of pandemic demands for ergonomics that supports the work process in the banks. This supports safety at the bank for employees and even to the customers (Aktar and Pangil, 2018), thus considering the pandemic situation, ergonomics and work content.

Considering the present context, hypotheses for the study are developed to contemplate the following aspects: (1) perception of the bank employees towards the changed work due to pandemic, (2) work challenges faced by the bank employee during pandemic, (3) perception towards the work ergonomics at workplace, (4) challenges at work and its relationship with regards to bank ergonomics and (5) relationship between ergonomics and employee engagement in banks.

To formulate the hypothesis for the study, the study developed a methodology based on the following steps: (1) *claim for the formulation of hypothesis*: to understand the impact of the pandemic on the work ergonomics and employee engagement in the banking sector. Based on this claim, null and alternative hypotheses were formulated in the study, (2) *criteria*: the criterion for the decision was based on the level of significance, which is less than 5%; this shows that the probability of obtaining a sample mean is less than 5% if the null hypothesis were true, then we conclude that the sample we selected is too unlikely, and so we reject the null hypothesis, (3) *sampling*: the study applied random sampling method with the participants as employees working in the banking sector and (4) *inference of the hypothesis*: the study applied partial least square (PLS) method to decide for the hypothesis with the significance value of *p*-value is undertaken to evaluate the results for the study (Muisyo *et al.*, 2022; Ababneh, 2021; Garmendia *et al.*, 2021).

Employees' perception towards work due to the pandemic

The pandemic has an unprecedented shock on the lives and livelihoods of individuals around the globe (Dubey and Tripathi, 2020). The impact is felt with fear of infection and greater uncertainty through the contraction in the economic activities and widespread shock to the labor market (Lazim *et al.*, 2020).

Perception of the employees towards the work changed, and the changes are as follows: (1) change in the job content as the operations in the organizations changed due to pandemic (2) work ergonomics changed due to remote working arrangements and (3) long hours of work as there was a change in the process of work (Gigauri, 2020).

In such an unprecedented uncertainty, the perception of the workforce changed towards the work content and job; hence to understand the impact of a pandemic on the perception of employees towards, the hypothesis is formulated as.

H1. Pandemic changed the perception of the workforce towards the work.

Influence of the pandemic on work challenges

The pandemic has influenced the working landscape to a large extent. The concept of work-from-home (WFH) has been provided to employees to work and complete the work obligations (Wang et al., 2021). Apart from WFH, organizations have given more liberty to the employees to adjust their work schedule and meet the challenges faced due to the pandemic (Caligiuri et al., 2020).

Further, the opportunity to WFH has become a buzz phrase with most organizations (Abualfadl *et al.*, 2021). The challenges are through down to workforce with regards to upskilling and reskilling on a war foot basis without giving any time, or else they may become vulnerable to the exercise of trimming the workforce by the companies (Almaiah *et al.*, 2020).

In the same vein as the uncertain situation due to COVID-19, work hazards have increased in the banks. The hazards include a serious threat of virus infection among the employees working in the banks. Those working online have longer hours on digital platforms and a higher level of dependence on technology (Mishra *et al.*, 2020).

Hence, considering the above discussion we formulate the following hypotheses for the study:

H2. There is a direct relationship between the pandemic and work challenges at the workplace. of COVID-19 on bank employees

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Perception towards the work ergonomics at the workplace

The ultimate aim of workplace ergonomics is to generally ensure employee safety and enhance performance. Beyond these objectives, many other benefits are known to accrue to an organization when management commits to the development and maintenance of ergonomics in the workplace. These benefits according to Alyan et al. (2021) include increased productivity, increased work quality, reduced turnover, reduced absenteeism and increased morale. From a safety perspective, Gyekye (2006) emphasizes that environmental conditions affect employee safety perceptions, which impact employee commitment. Similarly, extensive scientific research conducted by Roelofsen (2002) has also yielded indications suggesting that improving key ergonomics factors in the working environment results in a reduction in several complaints and absenteeism and an increase in productivity. Bentley et al. (2021) suggests that the key ergonomics factors that affect employee productivity and performance are office furniture, workspace design, noise/vibration, light intensity and ventilation/humidity. In the light of the above discussion, we formulate the following hypothesis as follows:

H3. Perception of employees towards work ergonomics has an impact on the job.

Challenges of work in banks due to ergonomics

For several years now, banks have been going through enormous changes in organization and structure. New technology and new ways of structuring the operation have left their mark on the working conditions and daily lives of employees (Wardani and Oktafiansyah, 2020).

Deregulation of labor markets, emerging technologies and new types of jobs have significantly reshaped working lives by continuous changes in employment and working conditions. Such a scenario has a relevant impact not only on companies' organizations but also on the working population's health (Wijewantha et al., 2020).

The banking sector is particularly well-deserved of a specific and thorough analysis because of the recent increase in psychosocial disorders of employees. This may be related to the major organizational changes affecting this sector and, in particular, to the restructuring processes resulting from the global economic crisis.

With this in mind, through a review of the literature, we selected the main studies dealing with work-related stress in banking so that we could reach a better understanding of the phenomenon as it relates specifically to this set of workers (Behravesh *et al.*, 2020). Based on the above discussion, we formulate the following hypothesis:

H4. Work challenges and ergonomics are related to working at the workplace.

Relationship between ergonomics and employee engagement in banks

The banking sector has witnessed considerable change in office ergonomics due to COVID-19 (Kaushik and Guleria, 2020). These changes have also influenced the work content and employee engagement programs of the banks (Kaushik and Guleria, 2020). In the context of ergonomics and work hazards, deeper studies are needed to understand employee engagement programs (Gaur, 2020).

The situation of COVID-19 has enhanced the risk level among the bank employees as they have to attend the bank work through offline mode and provide the services to organizations

and individuals; therefore, engaging bank employees during the pandemic situation is a challenge to banks (Dutta and Fischer, 2021)

These changes influence the employee engagement program; hence to understand the impact of employee engagement and ergonomics, the study frames the following hypothesis.

H5. Work ergonomics and employee engagement are related during the pandemic.

The above discussion with regards to conceptual framework and hypothesis developed are presented in Figure 1.

Research design

Data collection and procedure

The study adopted a survey methodology to capture the influence of work ergonomics and employees among the banks. We administered a survey questionnaire to the bank employees through hard-copy format and email, and we received survey responses from three cities Mumbai, Bangalore and Belgaum. The response from other cities was received due to lockdown situations and excess workload in the bank due to limited hours of work in the banks. To select our respondents, we listed the number of banks operating in these cities and established contact through telephone for a response from employees, a questionnaire was distributed among these employees for the response and a total of 438 valid questionnaires were received for the study. All measures in the study were rated on a five-point Likert Scale, ranging from 1 = strongly disagree to 5 = strongly agree. All 600 questionnaires were sent to the respondents, and 438 valid responses were received by the study; this yielded a response rate of 71.33%.

Sample description

The respondents in our sample include male N=252,58%, and female N=186,42%. The educational level of the respondents includes N=291,66% with bachelor's degree, master degree N=89,20% and other educational degrees with N=58,13%. The work experience of the respondents includes less than three years of work experience with N=58,13%, five years but less than ten years of work experience is N=66,15%. Employees with work experience of 10 years but less than 15 years N=77,18%, respondents with more than

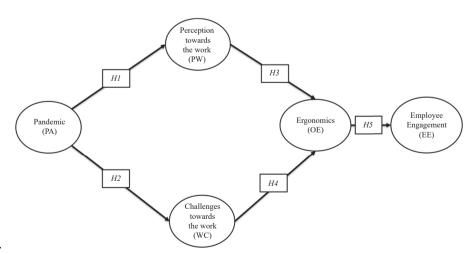


Figure 1. Conceptual framework of the study

10 years but less than 15 years of work experience N = 98, 22% and study participants with more than 15 years of work experience are N = 139, 32%. Designation of the respondents includes casher N = 91, 20%, officer N = 218, 50% and manager N = 129, 30%.

The influence of COVID-19 on bank employees

Measures

Pandemic and work: The pandemic influenced all levels of the organization, which includes managerial and operational levels (Prasad et al., 2020). Constructs associated with the study are based on the study of Ramasubramanian et al. (2020), and they are (1) biological threat due to pandemic (PA1), (2) change in technology (PA2), (3) higher level of stress (PA3), (4) physical stress (PA4) and (5) changed ergonomics (PA5).

Perception towards work: This measure includes the roles, responsibilities and reporting structure in the organization (Sadhna et al., 2020). Factors related to our study are related through the study of Yogesh et al. (2020): (1) role clarity (PW1), (2) responsibility (PW2), (3) reporting (PW3), (4) communication (PW4) and (5) structure (PW5).

Challenges towards the work: It refers to a situation within the workplace that has the potential to cause injury or adverse health effects for working in the office or factory (Goodell, 2020). Factors assorted with regards to the banking sector and work hazards are captured by the study conducted by Mishra et al. (2020); hence, we have developed constructs for study based on this study; they are (1) influence on organization culture (WC 1), (2) employee recognition and reward (WC2) (3) employee involvement on the job (WC3) (4) career growth and development (WC4) and (5) safety at work (WC5).

Ergonomics: The concept which is related to the study of space and practice at the workplace. The most fundamental emphasis of ergonomics is to understand the people's needs and their space to interact with co-workers and also to provide physical space to work (Wilson, 2000). Based on this understanding following studies (Kaushik and Guleria, 2020; Schulte et al., 2020), the constructs related to the study are as follows: (1) workstation comfort (OE1), (2) work environment (OE2), (3) lighting at the workplace (OE3), (4) sufficient rest periods at work (OE4) and (5) social distancing (OE5).

Employee engagement: It is a workplace approach resulting in the right conditions for all members of an organization to give their best each day, committed to their organization's goals and values, motivated to contribute to organizational success, with an enhanced sense of their well-being among the workforce. The study included the following constructs related to employee engagement based on the research of Aktar and Pangil (2018): (1) engaged work (EE1), (2) commitment to work (EE2), (3) positive attitude (EE3), (4) motivation to work (EE4) and (5) better relationship on the job (EE5).

Nonresponse bias

We evaluated nonresponse bias by comparing the response from the early respondents and late respondents in our study (Armstrong and Overton, 1977; Chen and Paulraj, 2004). Based on the response, we conducted a t-test for both respondents, and the results did not find any difference between the respondents and nonrespondents (i.e. p > 0.1). Hence, the non-response bias is a non-response bias in the study.

Common method bias

In the studies which include self-reported data, there is a possibility of common bias from multiple sources data; therefore, a common method bias study is recommended for the study (Podsakoff and Organ, 1986). The study adopted Harman's one-factor test for common method bias. The results from the total variance extracted by one factor exceed 50%, and then common method bias is present in the study (Podsakoff and Organ, 1986). The results

from our study showed 16.9%, which is less than 50%. Hence, there is no common method bias in the study.

Data analysis and results

The study applied WarpPLS 8.0, which is the most accepted PLS tool used for path-analysis models (Kock, 2017). This tool supports the methodological development of paths in comparison to the traditional PLS tool and thus supports building the gap between factor-based and composite-based structural equation modeling techniques. The study also applied Cronbach alpha to understand the reliability analysis of the constructs derived for the study.

Measurement model

The study findings from Chen and Paulraj (2004) suggested a three-stage process for measuring reliability, validity and unidimensionality. To evaluate the reliability for the constructs, we applied average correlation among the items in the scale; the results are indicated in Table 1, and the Cronbach's alpha value (α) for the items and scale were well above 0.7, which is higher than the recommended value of (0.6) (Cronbach, 1951). We also noted that all the individual factor loadings (λi) are greater than 0.5, the scale composite reliability (SCR) coefficients are greater than 0.7, and the average variance extracted (AVE) is greater than 0.5 (see Table 1). This supports that our constructs have adequate convergent validity (Fornell and Larcker, 1981; Chen and Paulraj, 2004).

Results

PLS does not assume a multivariate normal distribution. Hence, traditional parametric-based techniques for significance tests are inappropriate. PLS uses a bootstrapping procedure to estimate standard errors (SEs) and the significance of parameter estimates (Peng and Lai, 2012). We report the PLS path coefficients and *p*-values in Table 2. The estimated path coefficients are interpreted as standardized beta coefficients, and the same is presented in Figure 2, which shows the final PLS model.

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The study tested hypotheses: H1 (Pandemic \rightarrow Perception towards the work) ($\beta=0.54$, p=0.01), H2 (Pandemic \rightarrow Challenges towards the work) ($\beta=0.67$, p=0.01), H3 (Perception towards the work \rightarrow Ergonomics) ($\beta=0.88$, p=0.12), H4 (Challenges towards the work \rightarrow Ergonomics) ($\beta=0.63$, p=0.24) and H5 (Ergonomics \rightarrow Employee engagement) ($\beta=0.59$, p=0.07). The results indicate that H1 and H2 are supported ($\beta=0.54$, p=0.01; $\beta=0.67$, p=0.01) for the study hypothesis.

Discussion of results, implications for research and managers

The empirical results indicated with regards to the influence of ergonomics on employee engagement, Sarkar et al. (2020) argues that during the pre-COVID-19, employee engagement programs in the organizations were more focused on work—life balance. However, due to the COVID-19 situation, engagement programs have changed; hence today, the focus is more on the application of online tools to engage employees at the job (Gaur, 2020). Further, the work hazards have changed due to this pandemic, and banks are not exceptional, and work safety measures have changed from work hours to the biological threat on the job and physical

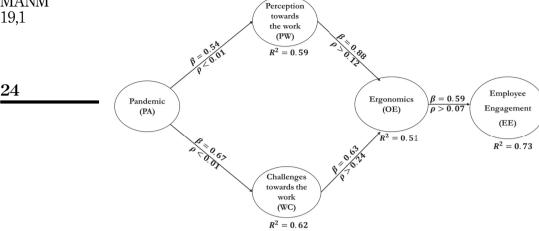
Constructs and latent variables	Indicators	A	λi	SCR	AVE	The influence of COVID-19
Pandemic and work Biological threat due to pandemic Change in technology Higher level of stress Physical stress Ergonomics	PA1 PA2 PA3 PA4 PA5	0.71 0.85 0.77 0.69 0.93	0.807 0.850 0.836 0.613 0.714	0.82	0.63	on bank employees
Perception towards the work Role clarity Responsibility Reporting Communication Structure of work	PW1 PW2 PW3 PW4 PW5	0.88 0.89 0.73 0.70 0.68	0.755 0.650 0.642 0.680 0.787	0.88	0.58	
Challenges towards the work Influence on organization culture Change in employee recognition and reward Employee involvement on the job Career growth and development Safety at work	WC1 WC2 WC3 WC4 WC5	0.89 0.82 0.77 0.79 0.85	0.714 0.810 0.517 0.763 0.614	0.94	0.81	
Ergonomics Workstation comfort Work environment Lighting at workplace Rest duration Social distancing	OE1 OE2 OE3 OE4 OE5	0.71 0.73 0.75 0.88 0.75	0.641 0.654 0.555 0.911 0.903	0.95	0.75	
Employee engagement Engaged work Commitment to work Attitude toward work Motivation towards work Relationship on job	EE1 EE2 EE3 EE4 EE5	0.88 0.76 0.87 0.88 0.91	0.832 0.719 0.693 0.802 0.730	0.75	0.55	Table 1. Cronbach's alpha, SCR and AVE

				p-	
Hypothesis	Effect of	Effect on	β	value	Results
H1	Pandemic	Perception toward the work	0.54	0.01	Supported
H2	Pandemic	Challenges towards the work	0.67	0.01	Supported
НЗ	Perception towards the work	Ergonomics	0.88	0.12	Not supported
H4	Challenges towards the work	Ergonomics	0.63	0.24	Not supported
H5	Ergonomics	Employee engagement	0.59	0.07	Not supported

safety at work (Dutta and Fischer, 2021). From the work content perspective, the application of the online mode of work has changed the work dynamics in the organization (Mishra *et al.*, 2020). Considering these background studies, this study provides more insights by integrating ergonomics, work contents, hazards and engagement among the bank employees.

First, we found that pandemic has a significant effect on the perception of the employees working in the banking sector. This finding can be explained by the argument that the work





Note(s): The study tested hypotheses: HI (Pandemic \rightarrow Perception towards the work) $(\beta = 0.54, p = 0.01), H2$ (Pandemic \rightarrow Challenges towards the work) $(\beta = 0.67, p = 0.01), H3$ (Perception towards the work \rightarrow Ergonomics) ($\beta = 0.88, p = 0.12$), H4 (Challenges towards the work \rightarrow Ergonomics) ($\beta = 0.63$, p = 0.24) and H5 (Ergonomics \rightarrow Employee Enagegement) $(\beta = 0.59, p = 0.07)$. The results indicate that H1 and H2 are supported $(\beta = 0.54, p = 0.01)$; $\beta = 0.67$, p = 0.01) for the study hypothesis

Figure 2. Final PLS model

> process in the banks has changed from the offline mode to online mode for major activities in the bank. Hence, there is a change in the perception of the employees towards the work.

> Second, the pandemic has a significant influence; hence, challenges towards the work have increased in the banking sector. This finding indicates that banks have to take measures to reduce the challenges towards work during a pandemic. Measures include sanitation, social distancing and monitoring the health of the employees.

> Third, the perception of the employees towards work ergonomics in the banks has indicated negative effects; hence, more measures are needed in the banking sector to improve work ergonomics during the current pandemic scenario at work.

> Fourth, challenges towards the work have increased due to lack of ergonomics measures in the banks; hence, the results have indicated negative results in the study. This finding is supported by the fact that COVID-19 has influenced the work hazards on the job; hence, organizations are findings measures to over this challenge on the job.

> Fifth, the results of the study with regards to the banking sector indicate that ergonomics and engagement programs need more understanding to improve the present ergonomics at the bank and improve engagement programs in the bank.

> Based on our expectation, the present study found that ergonomics in the bank have changed due to the pandemic situation, and banks have taken measures to protect the bank employees from the threat of COVID-19. These measures include social distancing, sanitation. social distancing and monitoring the health of the employees. The study's insights on the finding of employee engagement measures have changed due to COVID-19; hence, there is an influence on the organizational culture, communication pattern and motivation level of employees in the banks. Another insight of this study indicates that hazard levels have increased in the banks due to the pandemic situation; however, banks need to develop measures and tools which will support the employee engagement programs in the bank.

of COVID-19

on bank

employees

Theoretical contributions

The role of ergonomics and work safety and employee engagement is well discussed in the literature (see Kaushik and Guleria, 2020; Prasad et al., 2020 Aktar and Pangil, 2018). What is less understood is how ergonomics influence employee engagement due to pandemic situations, such as COVID-19 in the banking sector. The key aspects of this study signify our main contribution to the literature on ergonomics, work safety and engagement. First, our study is one of the few studies to integrate ergonomics and work safety and employee engagement from the perspective of COVID-19 and the banking sector. Before this study, research conducted by Mishra et al. (2020), and Ghaffari et al. (2021) have integrated ergonomics and work safety and employee engagement from the pre-COVID-19 perspective in the organizations. Second, our study provides an insight from the influence of COVID-19 on banks concerning changed work culture, fear of biological threat, changed communication in the banks and the influence of technology in the banking operations. Hence, our results provide an initial step for research to evaluate the influence of ergonomics on workplace safety and employee engagement in the banking sector.

Managerial implications

Our research findings can offer useful guidance to management and banking employees. First, office ergonomics in the bank has to be improved with regards to social distancing at banks, a limited number of customers in branch and encouraging customers to use online platforms of banking for the safety of employees and customers. This would benefit in improving the safety of the employees in the banks.

Second, psychological factors among the banking employees have been influenced due to COVID-19, and the stress level has increased among the bank employees. Therefore, banks have to take measures to reduce stress. The stress among the employees can be reduced through training programs on health and safety and also by encouraging employees to work from home.

From this perspective, we understand that ergonomics, work safety and employee engagement programs in the organization provide directions to improve the organizational culture and enhance the performance of the employees in the bank.

Conclusion and future directions for research

The above studies indicate that COVID-19 has changed the process and procedures in the banking sector of India; this would also influence engagement programs and ergonomics in the banks. Therefore, COVID-19 demands more attention of the bank employees developing continuous strategy concerning the health and safety of employees. Overall, study results indicate that the pandemic has changed the perception of the employees in the bank and has also influenced the work ergonomics. This has demanded developing measures and strategies to improve engagement programs and improving work ergonomics at banks. Further, future studies could focus more on the influence of COVID-19 on the organizational culture of the banking system and provide insight into this direction of research.

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of COVID-19

on bank

employees

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of COVID-19

on bank

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