

Burnout, stress, and their correlates among bank employees of South India: a cross-sectional study

Guruprasad Vinod , Srikant Ambatipudi* 

Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Govt. Medical College Campus, Thiruvananthapuram, India

Ann Occup Environ Med. 2024;36:e22
<https://doi.org/10.35371/aoem.2024.36.e22>
eISSN 2052-4374



*Corresponding author:
Srikant Ambatipudi

Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Govt. Medical College Campus, Thiruvananthapuram 695011, India
E-mail: asrikant@sctimst.ac.in

ABSTRACT

Background: The banking sector is one of the job sectors that experience high stress, workload, complex interpersonal relationships, and job burnout as it involves interaction with the public and financial responsibilities, which leads to high burnout and stress. The present study was conducted to assess the prevalence of burnout and stress among bank employees and to find the associated factors.

Methods: This cross-sectional survey was conducted among 282 bank employees of Kollam district, Kerala, India. Data was collected using a self-administered questionnaire related to the socio-demographic and professional details. We used the Oldenburg Burnout Inventory (OLBI) to screen for burnout levels. Depression Anxiety Stress Scale (DASS 21) to screen for the levels of depression, anxiety, and stress among study participants. Descriptive statistics were used to summarize the data, and logistic regression was used to identify the factors associated with the levels of burnout and stress.

Results: Of 282 study participants, moderate to high levels of burnout were observed in 232 participants (82.2%), and 74 participants (26.2%) had mild to extremely severe levels of stress. Daily average working duration showed an association with higher levels of burnout (adjusted odds ratio [OR_{Adj}]: 2.391; 95% confidence interval [CI]: 1.12–5.10) and stress (OR_{Adj}: 3.37; 95% CI: 1.58–7.16).

Conclusions: A high prevalence of burnout and stress was observed in the present study. The duration of working hours was associated with both burnout and stress. Therefore, regulating the working hours may help adequately manage stress and burnout, thereby improving the mental health of bank employees.

Keywords: Psychological burnout; Psychological stress; Personal banking; Occupational health

BACKGROUND

Health is not merely the absence of disease but a positive state of physical, mental, and social well-being.¹ Accord-

ing to estimates, occupational morbidities can reduce a nation's gross domestic product by up to 10% to 20%.² Being a service industry, banking involves a great deal of interpersonal tension, which causes employees to lose

Received: May 16, 2024 Revised: July 25, 2024 Accepted: July 28, 2024 Published: August 28, 2024

© 2024 Korean Society of Occupational & Environmental Medicine

© This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

energy over time.³⁻⁵ Each area of employment in banking requires some interaction with the public and is connected to financial obligations.⁵ This characteristic of the banking sector makes it a field with intense stress.

Burnout is a syndrome that results from chronic workplace stress that has not been successfully managed. It is associated with feelings of energy depletion or exhaustion, increased mental distance from one's job or disengagement, and reduced professional efficacy (World Health Organization International Classification of Diseases, 11th revision). Stress is a state in which one feels tension in the body or mental strain.⁶ People's regular obligations and routines, such as job, family, and finances, can give rise to stressors or elements that can generate stress.⁷ Most frequently, when people speak about burnout, they allude to a state of stress or tiredness that they or someone else is going through.⁸ Feeling overextended and being at the limit of one's mental and physical capacity is referred to as exhaustion or stress.⁹

Job discontent, higher staff turnover, decreased productivity, and employee absenteeism are all associated with job burnout.¹⁰ Therefore, job burnout and stress are a major issue for people working in banks.^{3,8,9,11} It has also been shown that burnout and stress are associated with chronic illnesses among bank employees.¹² The variety of labor, prejudice, favoritism, delegating, and conflicting tasks that bank employees must deal with, prevent them from taking the time to unwind.¹² Additionally, the bank employees claim that they are underpaid for the effort they put in to give their customers the finest service possible. Job discontent, higher staff turnover, decreased productivity, and employee absenteeism are all associated with job burnout.¹⁰ Hence, it is essential to discern the prevalence of job burnout and its correlates to prevent and reduce the effect it has on bank workers' ability to perform well in their jobs.¹³ Although many studies have been reported on burnout and stress among bank employees from the high-income countries, only some studies have been reported from low and middle-income countries, especially India.^{12,14,15}

METHODS

Sample size calculation

A study among bank employees in Mysore, India,

showed that more than 70% of bank employees suffer from moderate to severe levels of stress.² Considering the prevalence of stress as 70%,² with an absolute precision of 5% over the 95% confidence interval (CI), the estimated sample size was 323. The sample size was calculated using the formula: $n = \frac{Z^2 p(1-p)}{E^2}$ where n = minimum sample size when the population is large, Z = confidence level at 95% (standard value of 1.96), p = prevalence (taken as 0.72 based upon the prevalence of stress in a similar study among bankers in Puducherry of India), E = allowable error (5% of p).

Due to the coronavirus disease 2019 (COVID-19)-related restrictions during the data collection and the excess workload of employees during the week before the end of the financial year, we were able to collect data from 282 participants.

Study population and design

There are 404 bank branches in India's Kollam district of Kerala state. The bank branches were divided into four categories based on the propriety and type of functioning, which are nationalized ($n = 237$), private sector commercial banks ($n = 132$), regional rural/Gramin Banks ($n = 25$), and small finance banks ($n = 10$).

A cross-sectional survey was conducted to assess the prevalence of burnout and stress among the bank employees working in the 78 bank branches selected through stratified random sampling proportionate to the type of banks in Kollam district. Thus, 46 branches of nationalized banks, 4 regional rural banks, 26 private sector commercial banks, and two small finance banks were selected.

Clerical and officer-grade employees who had completed at least one year of service in these institutions were invited to participate in the study and were conveniently sampled. The officers were the managerial staff responsible for the overall working of a bank branch including the management of premises and equipment. They do the canvassing of business, procurement of deposits, disbursal of loans, and selling other banking products. They evaluate the customers, verify documents, check mortgage items like jewels, and decide upon services. The clerical staff, carry out cash dealings, credit and debit services, filling of the various forms like the ones for account opening, deposit, withdrawal, etc.

They are mostly considered as customer service associates and are the first point of contact with customers. The Cooperative banks were excluded from the study since the employees were not categorized as officers and clerks. Non-Banking Financial Companies (NBFCs) were excluded since NBFCs are not banks according to the guidelines of the Reserve Bank of India (RBI).

The duration of data collection was from March 2022 to May 2022.

Tools used for the study

The tools used for the data collection were (1) a structured self-administered questionnaire about the socio-demographic characteristics, professional details, habits, and comorbidities, (2) the Oldenburg Burnout Inventory (OLBI), and (3) the Depression Anxiety Stress Scale (DASS 21).

Burnout was measured using the OLBI. There were 16 statements in total, to which the participants could mark their responses on a 4-point Likert scale. The sum of the scores obtained by each participant was used to assess the level of burnout they experienced. The total scores were divided into 25th, 50th, and 75th percentiles. Subsequently, the burnout scores were classified as low (scores less than the 25th percentile), moderate (scores greater than and equal to the 25th percentile [score 36] and less than the 75th percentile [score 45]), and high (scores greater than and equal to the 75th percentile). A similar classification was also done for the domains of OLBI, i.e., Disengagement and Exhaustion.^{16,17} The respondents with moderate and high levels of burnout were considered to have burnout.

Stress was measured using the statements for stress in the DASS 21. The mild to extremely severe levels obtained in the DASS 21 were considered to have either of the respective conditions, namely, depression, anxiety, or stress.¹⁸⁻²⁰

Statistical analysis

The data obtained was entered in Microsoft Excel. All statistical analyses were performed using IBM SPSS version 25 (IBM Corp., Armonk, NY, USA). The prevalence of burnout and stress was estimated by calculating the proportion of participants with moderate and high levels of burnout and the participants with mild to ex-

tremely severe stress levels, respectively. The 95% CIs of the prevalence proportions were calculated using the Clopper-Pearson test. The internal consistency of the OLBI and DASS 21 was determined using Cronbach's alpha. We then assessed the association of burnout and its domains and depression, anxiety, and stress with the socio-demographic characteristics (education status, marital status, and monthly household income), professional details (type of bank, location of the bank branch, professional cadre, years of working experience in banking sector and the daily average working hours), and lifestyle factor (alcohol consumption). In the univariate analyses, comparisons were done using Pearson chi-square tests. Those variables that showed statistically significant *p*-values were then taken for binomial logistic regression to find the crude odds ratios (COR) with their 95% CIs. Multivariable analyses were then done using logistic regression to adjust possible confounders.

Ethics statement

Ethical clearance was obtained from the Institutional Ethics Committee (certificate number: SCT/IEC/1819/JANUARY/2022). Informed consent was obtained from all participants of the study. The identity of the participants was not revealed throughout the study. Participation in the study was purely voluntary, without any incentives or financial compensation to the study participants.

RESULTS

Of the 282 study participants, 91 responded through Google Forms (online mode), while the rest responded through paper forms. The online and offline data collection modes differed in marital status, type of bank, and professional category ([Supplementary Table 1](#)). However, the offline and online mode of data collection was not associated with the outcomes, namely burnout, its components, depression, anxiety, and stress ([Supplementary Table 2](#)). Hence, the data collected from online and offline modes were analyzed together. The socio-demographic and professional details of the study participants are shown in [Table 1](#). The median age of the participants was 32 years and ranged from 23 to 61 years. More than half of the participants (56.7%) were

Table 1. Socio-demographic and professional details of participants with sex-stratified characteristics

Variable	Male (n = 122)	Female (n = 160)	Total (n = 282)
Age (years)	34 (23–61)	32 (23–58)	32 (23–61)
Marital status			
Never married	31 (25.4)	20 (12.5)	51 (18.1)
Currently married	87 (71.3)	134 (83.8)	221 (78.4)
Divorced	1 (0.8)	3 (1.9)	4 (1.4)
Widowed	1 (0.8)	1 (0.6)	2 (0.7)
Not revealed	2 (1.6)	2 (1.3)	4 (1.4)
Education level			
Graduate or below	87 (71.3)	107 (66.9)	194 (68.8)
Postgraduate or doctorate	35 (28.7)	53 (33.1)	88 (31.2)
Monthly household income			
₹≥20,000 and ≤₹30,000	16 (13.1)	26 (16.3)	42 (14.9)
₹>30,000 and ≤₹40,000	18 (14.8)	32 (20.0)	50 (17.7)
>₹40,000	88 (72.1)	102 (63.7)	190 (67.4)
Type of bank			
Public sector bank	77 (63.1)	115 (71.9)	192 (68.1)
Private sector commercial or small finance bank	45 (36.9)	45 (28.1)	90 (31.9)
Location of branch			
Urban	43 (35.2)	60 (37.4)	103 (36.6)
Semi-urban	61 (50.0)	90 (56.3)	151 (53.5)
Rural	18 (14.8)	10 (6.3)	28 (9.9)
Professional category			
Clerk	38 (31.1)	75 (46.9)	113 (40.1)
Officer or higher	84 (68.9)	85 (53.1)	169 (59.9)
Years employed			
1–10	89 (73.0)	116 (72.5)	205 (72.7)
>10	33 (27.0)	44 (27.5)	77 (27.3)
Daily average working hours			
≤8	35 (28.7)	70 (43.75)	105 (37.2)
>8	87 (71.3)	90 (56.25)	177 (62.8)

Values are presented as median (range) or number (%).

females. Of the 282 participants, 221 (78.4%) were married. Almost two-thirds of the participants (n = 183) had completed graduation, and nearly one-third (n = 88) were postgraduates or doctorates.

Almost two-thirds of the participants were employed in the public sector (nationalized and regional rural banks). Over half of the participants were employees of bank branches in semi-urban regions. A majority of the participants were employed at officer or higher-level grades. Most (n = 177) worked more than 8 hours a day.

Level and factors associated with burnout

The Cronbach's alpha values were 0.856 for burnout, 0.7 for disengagement, and 0.82 for exhaustion. Almost 82% (95% CI: 77.3%–86.5%) of the respondents had moder-

ate to high levels of burnout, of which 28.7% (95% CI: 23.5%–34.4%) had high levels. Fig. 1 shows the levels of burnout among the participants and the domains of burnout, namely disengagement and emotional exhaustion. The proportion of participants with moderate to high levels of disengagement was 82.3% (95% CI: 77.3%–86.5%), while 79.5% (95% CI: 74.2%–84.0%) showed moderate to high levels of exhaustion.

Burnout was associated with the professional category ($\chi^2 = 6.422$, $p = 0.011$) and daily average working hours ($\chi^2 = 11.214$, $p = 0.001$) (Supplementary Table 3). As expected, the two domains of burnout, i.e., the disengagement and exhaustion domains, were associated with the professional category ($\chi^2 = 4.91$, $p = 0.027$ and $\chi^2 = 5.441$, $p = 0.020$, respectively) and daily average working hours

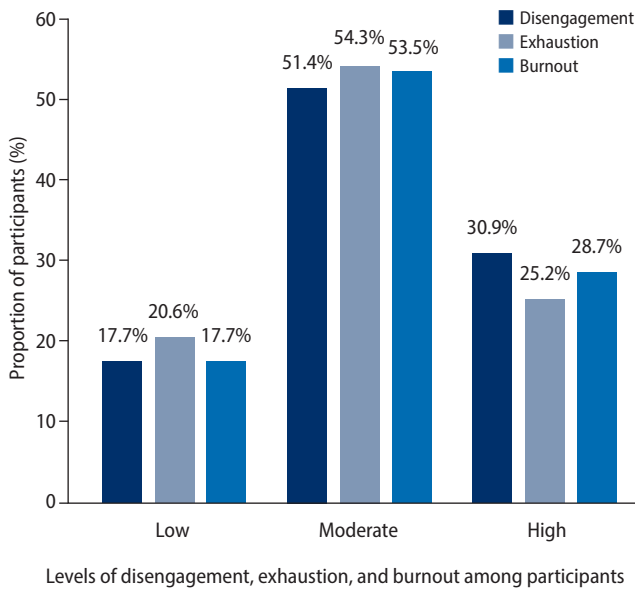


Fig. 1. Levels of burnout, and its domains among the study participants.

($\chi^2 = 9.158, p = 0.002$ and $\chi^2 = 10.054, p = 0.002$) (Supplementary Tables 4 and 5). In addition, the disengagement domain was associated with the years of employment ($\chi^2 = 4.935, p = 0.026$). The average daily working hours showed a significant association with burnout and both of its domains (Table 2). The participants who worked for more than 8 hours a day had higher odds of burnout (adjusted odds ratio [OR_{Adj}]: 2.39; 95% CI: 1.12–5.10), feeling disengaged (OR_{Adj}: 2.50; 95% CI: 1.15–5.47) and exhausted (OR_{Adj}: 2.22; 95% CI: 1.09–4.54) compared to those who worked less than 8 hours a day. Another finding was that participants who had been employed for more than 10 years were at lesser odds of feeling disengaged than those used for up to 10 years or less. The sex-stratified analysis revealed that women who worked for more than 8 hours had higher odds of experiencing burnout (COR: 3.2; 95% CI: 1.19–8.57) including disengagement (COR: 3.11; 95% CI: 1.12–8.67) and exhaustion (COR: 3.67; 95% CI: 1.39–9.67) as compared to men

Table 2. Association of independent variables with burnout and its domains

Variable	Crude odds ratio (COR)	p-value (COR)	Adjusted odds ratio (OR _{Adj})	p-value (OR _{Adj})
Disengagement				
Professional category				
Clerk	Reference		Reference	
Officer or higher	1.99 (1.08–3.69)	0.028 ^a	1.175 (0.54–2.55) ^b	0.684
Years employed				
1–10	Reference		Reference	
>10	0.49 (0.26–0.93)	0.028 ^a	0.45 (0.23–0.865) ^c	0.017 ^a
Daily average working hours				
≤8	Reference		Reference	
>8	2.56 (1.38–4.77)	0.003 ^a	2.51 (1.15–5.475) ^d	0.021 ^a
Exhaustion				
Professional category				
Clerk	Reference		Reference	
Officer or higher	1.99 (1.11–3.56)	0.021 ^a	1.27 ((0.62–2.59) ^e	0.515
Daily average working hours				
≤8	Reference		Reference	
>8	2.55 (1.41–4.58)	0.002 ^a	2.22 (1.09–4.54) ^f	0.028 ^a
Burnout				
Professional category				
Clerk	Reference		Reference	
Officer or higher	2.20 (1.185–4.09)	0.012 ^a	1.35 (0.63–2.81) ^e	0.440
Daily average working hours				
≤8	Reference		Reference	
>8	2.835 (1.52–5.295)	0.001 ^a	2.39 (1.12–5.10) ^f	0.024 ^a

^aValues showing statistically significant association; ^bAdjusted with years employed; ^cAdjusted with professional category and daily average working hours; ^dAdjusted with professional category and years employed; ^eAdjusted with daily average working hours; ^fAdjusted with professional category.

who worked for more than 8 hours. It also showed that female officers have higher odds of suffering exhaustion (COR: 2.74; 95% CI: 1.06-7.05) than male officers (Supplementary Table 6).

Levels and factors associated with depression, anxiety, and stress

The Cronbach's alpha values were 0.877 for depression, 0.830 for anxiety, and 0.827 for stress.

Fig. 2 shows the details of the levels of depression, anxiety, and stress among the study participants. It shows that 113 participants (40.1%; 95% CI: 34.3%–46.0%) had mild to extremely severe levels of depression, and of the 135 participants (47.9%; 95% CI: 41.9%–53.9%) had mild to extremely severe levels of anxiety. Seventy-four participants (26.2%; 95% CI: 21.2%–31.8%) had mild to extremely severe stress levels, out of which 43 of them had moderate to highly severe stress levels.

Both depression and anxiety were associated with the education level ($\chi^2 = 4.118, p = 0.042$ and $\chi^2 = 4.102, p = 0.043$, respectively) and daily average working hours ($\chi^2 = 10.801, p = 0.001$ and $\chi^2 = 10.701, p = 0.001$, respectively) (Supplementary Tables 7 and 8). Stress was associated with the professional category ($\chi^2 = 4.468, p = 0.035$) and daily average working hours ($\chi^2 = 14.4, p < 0.001$) (Sup-

plementary Table 9). The daily average working hours were associated with depression, anxiety, and stress after adjusting for the education level and professional category. The participants who worked for more than 8 hours a day had higher odds of depression (OR_{Adj}: 2.23; 95% CI: 1.32–3.77), anxiety (OR_{Adj}: 2.15; 95% CI: 1.30–3.56) and stress (OR_{Adj}: 3.37; 95% CI: 1.58–7.16) as compared with those who worked less than 8 hours a day (Table 3).

Burnout and its association with depression, anxiety, and stress

There was a significant association between burnout and its domains with depression, anxiety, and stress, and the associations remained significant even after adjusting for the other associated independent variables, namely the professional category and daily average working hours (Supplementary Table 10). Participants who showed disengagement had higher odds of having depression (OR_{Adj}: 3.81; 95% CI: 1.7–8.56) and stress (OR_{Adj}: 4.16; 95% CI: 1.42–12.17). Participants who were exhausted had higher odds of suffering from depression (OR_{Adj}: 5.83; 95% CI: 2.51–13.50), anxiety (OR_{Adj}: 5.43; 95% CI: 2.6–11.38), and stress (OR_{Adj}: 7.25; 95% CI: 2.17–24.22). Participants who were burned out also had high-

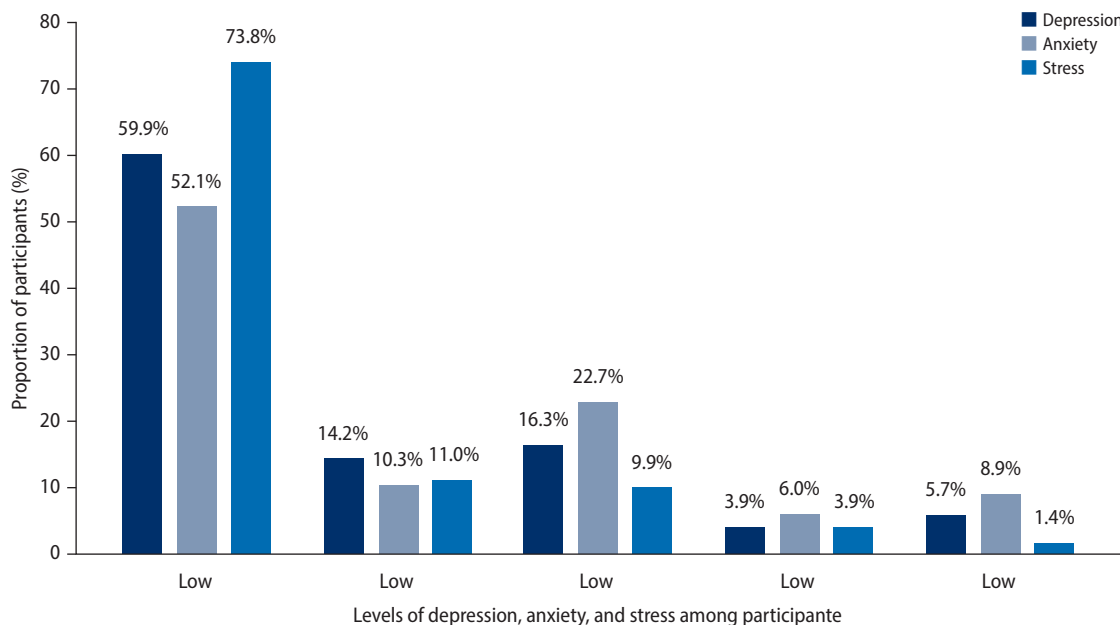


Fig. 2. Levels of depression, anxiety, and stress among the study participants.

Table 3. Association of independent variables with depression, anxiety, and stress

Variable	Crude odds ratio (COR)	<i>p</i> -value (COR)	Adjusted odds ratio (OR _{Adj})	<i>p</i> -value (OR _{Adj})
Depression				
Education level				
Graduate or below	Reference		Reference	
Postgraduate or doctorate	1.69 (1.02–2.82)	0.043 ^a	1.49 (0.89–2.52) ^b	0.132
Daily average working hours				
≤8	Reference		Reference	
>8	2.37 (1.41–3.98)	0.001 ^a	2.23 (1.32–3.77) ^c	0.003 ^a
Anxiety				
Education level				
Graduate or below	Reference		Reference	
Postgraduate or doctorate	1.69 (1.015–2.805)	0.044 ^a	1.49 (0.89–2.515) ^b	0.131
Daily average working hours				
≤8	Reference		Reference	
>8	2.28 (1.385–3.75)	0.001 ^a	2.148 (1.30–3.56) ^c	0.003 ^a
Stress				
Professional category				
Clerk	Reference		Reference	
Officer or higher	1.84 (1.04–3.25)	0.036 ^a	0.98 (0.50–1.95) ^b	0.959
Daily average working hours				
≤8	Reference		Reference	
>8	3.33 (1.75–6.34)	2.43 × 10 ⁻⁴	3.37 (1.58–7.16) ^d	0.002 ^a

^aValues showing statistically significant association; ^bAdjusted with daily average working hours; ^cAdjusted with education level; ^dAdjusted with professional category.

er odds of experiencing depression (OR_{Adj}: 4.49; 95% CI: 1.92–10.50), anxiety (OR_{Adj}: 2.72; 95% CI: 1.36–5.46) and stress (OR_{Adj}: 5.7; 95% CI: 1.69–19.19).

DISCUSSION

In the present study we assessed the prevalence of burnout, depression, anxiety and stress in bank employees of Kollam district. In doing so, we also identified the factors associated with burnout, depression, anxiety and stress among the bank employees.

Our study found that most participants had moderate to high levels of burnout, which was consistent with the findings of other studies of burnout among bank employees in other countries.^{21,22} However, a recent study among bank officers in Northern India found that only 19.4% of the participants suffered from pathological levels of burnout. This difference may be due to the different tools used (Shirom-Melamed Burnout Questionnaire).¹⁵ One-third of the participants suffered from stress. Studies among bank employees in India found that almost 70% of the participants had mod-

erate to severe stress.^{2,12} However, our study identified that of the 282 participants, 43 (15.2%) had moderate to severe stress. This difference may be attributed to the difference in the tools used for measuring stress and the study settings. Although our sample size was adequate to assess moderate to severe stress prevalence of 15.2% (95% CI: 11.3%–20%), which falls within the margin of error of 5% and justifies our findings. Indeed, our findings were similar to a recent study conducted in Bangladesh among bank employees, where 11.1% of the study participants were severely stressed²³ and a recent study in North India, where 7.9% of the bank officers were found to be severely stressed.¹⁵

It was also found that 40% of the employees had mild to extremely severe levels of depression, consistent with another study among bank employees in China.²⁴

Burnout was found to have no association with any of the socio-demographic characteristics. This may be due to the homogeneity of the socio-demographic profile of the study participants. The study participants had fairly similar levels of education and monthly household income. Our findings are supported by previously

published literature which didn't reveal any association between burnout and socio-demographic characteristics.¹² The officers and employees who worked at senior levels had higher odds of having burnout and stress. This was mainly due to the finding that officers and higher-grade employees worked for higher duration than the clerks, and possibly had more responsibilities. The work duration of the employees was the main factor that was found to have association with both burnout and stress. The employees who worked for higher durations on a daily basis were at higher odds of having burnout and its domains. This association between burnout and working duration has been demonstrated in other studies.^{25,26} It was also found that the female employees who worked for higher durations were at higher risk of having burnout and its domains namely, disengagement and exhaustion as compared to the males. Similar findings were reported by a survey in the United States.^{27,28}

Depression and anxiety were found to have association with the education level of the study participants. Similar finding was discussed in another study also.²⁹ The levels of stress among the participants were not associated with the type of bank where they worked. This finding was consistent with another study among public and private sector bank employees in India.³⁰ The officers and employees who worked at higher levels had higher odds of having stress. The working duration of the employees was the main factor that was found to have an association with burnout and stress. The employees who worked for higher durations daily had higher odds of having depression, anxiety and stress. Similarly, other studies have also shown the association of psychological stress with work hours.³¹

Burnout and stress are manageable conditions that have been found to affect employees' health and productivity; hence, their effects on bank employees need to be addressed. For banks, regulating working hours and helping employees manage their burnout and stress levels may be beneficial policy options with a public health impact. In this regard, one of the programs, 'Smiles,' was introduced, which utilizes the services of trained psychosocial intervention specialists.³² Interventions intended to regulate the work duration of bank employees, along with adequate staffing, may benefit

the employees.

Our study is not without limitations. The inability to infer causality is an inherent limitation of cross-sectional studies. Another limitation is that, at an individual level, it would be difficult to separate the level of personal burnout and stress from the professional one. The participants' chances of having recall bias cannot be ignored. Further, the tools used for estimating the prevalence of burnout and emotional states of depression, anxiety, and stress are screening tools needing corroboration with clinical assessment. Overreporting among the participants would have also led to information bias and overestimation of the strength of the association. Finally, the data collection was done during the COVID-19 pandemic, which also might have led to the overestimation of prevalence.

CONCLUSIONS

The banking sector is a critical factor that influences the development of any economy, and hence, it is crucial for developing economies. Therefore, the employees' health, efficiency, and productivity need to be maintained for banks' proper and efficient functioning. Burnout and stress have been found to affect employees' health and productivity; hence, their effects on bank employees need to be addressed.

Burnout and stress are manageable conditions. Regulating the working hours and helping employees manage their burnout and stress levels may be a beneficial policy option with a public health impact.

NOTES

Abbreviations

CI: confidence interval; COR: crude odds ratio; COVID-19: coronavirus disease 2019; DASS: Depression Anxiety Stress Scale; NBFC: Non-Banking Financial Companies; OLBI: Oldenburg Burnout Inventory; OR: odds ratio; OR_{Adj}: adjusted odds ratio; RBI: Reserve Bank of India

Competing interests

The authors declare that they have no competing interests.

Author contributions

Conceptualization: Vinod G. Data curation: Vinod G. Formal analysis: Vinod G, Ambatipudi S. Investigation: Vinod G, Ambatipudi S. Methodology: Vinod G, Ambatipudi S. Software: Vinod G, Ambatipudi S. Supervision: Ambatipudi S. Writing - original draft: Vinod G, Ambatipudi S. Writing - review & editing: Vinod G, Ambatipudi S.

Acknowledgments

We want to express our deep and sincere gratitude to all the bank employees who participated in the study. We would also like to thank the Canara Bank Employees Union and Mr. E.B. Mohan Kumar, who helped initiate dialogues with the bank employees.

SUPPLEMENTARY MATERIAL

Supplementary Table 1. Sociodemographic, professional, and lifestyle characteristics of the study participants who responded through online or offline mode

Supplementary Table 2. Association of burnout and DASS components with the mode of data collection

Supplementary Table 3. Association of burnout with the sociodemographic, professional and lifestyle features

Supplementary Table 4. Association of disengagement with the sociodemographic, professional and lifestyle characteristics

Supplementary Table 5. Association of exhaustion with the sociodemographic, professional and lifestyle features

Supplementary Table 6. Sex-stratified multivariable analysis of the independent variables with disengagement and exhaustion

Supplementary Table 7. Association of depression with the sociodemographic, professional, and lifestyle characteristics

Supplementary Table 8. Association of anxiety with the sociodemographic, professional and lifestyle characteristics

Supplementary Table 9. Association of stress with the sociodemographic, professional and lifestyle characteristics

Supplementary Table 10. Association between burnout and its domains with depression, anxiety, and stress

REFERENCES

1. Constitution of the World Health Organization. <https://www.who.int/about/governance/constitution>. Updated 1946. Accessed July 3, 2022.
2. Malamardi SN, Kamath R, Tiwari R, Nair BV, Chandrasekaran V, Phadnis S. Occupational stress and health-related quality of life among public sector bank employees: a cross-sectional study in Mysore, Karnataka, India. *Indian J Occup Environ Med* 2015;19(3):134–7.
3. Giorgi G, Arcangeli G, Perminiene M, Lorini C, Ariza-Montes A, Fiz-Perez J, et al. Work-related stress in the banking sector: a review of incidence, correlated factors, and major consequences. *Front Psychol* 2017;8:2166.
4. Leka S, Griffiths A, Cox T. *Work Organization and Stress: Systematic Problem Approaches for Employers, Managers and Trade Union Representatives*. Geneva, Germany: World Health Organization; 2003.
5. Tehrani SA, Keshtkar A, Ramasamy A, Fadaei M. The worldwide prevalence of burnout syndrome among bank employees: a systematic review and meta-analysis protocol. *Syst Rev* 2021;10(1):283.
6. Goodnite PM. Stress: a concept analysis. *Nurs Forum* 2014; 49(1):71–4.
7. National Cancer Institute. Stress and cancer. <https://www.cancer.gov/about-cancer/coping/feelings/stress-fact-sheet>. Updated 2022. Accessed February 21, 2023.
8. Khattak JK, Khan MA, Haq AU, Arif M, Minhas AA. Occupational stress and burnout in Pakistan's banking sector. *Afr J Bus Manage* 2011;5(3):810–7.
9. Gupta B, Mittal S, Mittal V. Analyzing the impact of job burnout on job satisfaction: a study on Indian bank employees. In: *Special Issue for International Youth Symposium, Vol. 10; 2018 Jan. Ahmedabad, India: Gujarat University; 2018, 19-30.*
10. Khalid A, Pan F, Li P, Wang W, Ghaffari AS. The impact of occupational stress on job burnout among bank employees in Pakistan, with psychological capital as a mediator. *Front Public Health* 2019;7:410.
11. Valente M, Wang YP, Menezes PR. Structural validity of the Maslach Burnout Inventory and influence of depressive symptoms in banking workplace: unfastening the occupational conundrum. *Psychiatry Res* 2018;267:168–74.
12. Kumar SG, Sundaram ND. Prevalence of stress level among Bank employees in urban Puducherry, India. *Ind Psychiatry J* 2014;23(1):15–7.

13. Durrah O, Chaudhary M, Gharib M. Organizational cynicism and its impact on organizational pride in industrial organizations. *Int J Environ Res Public Health* 2019;16(7):1203.
14. Mutsvunguma P, Gwandure C. The psychological well-being of employees who handle cash in a bank in inner city Johannesburg. *Psychol Health Med* 2011;16(4):430–6.
15. Singh A, Bansal R, Gupta CK, Kumar N, Gambhir N. Job burnout and perceived stress among bank officers of Meerut: a cross-sectional study. *Indian J Occup Environ Med* 2023;27(3):205–8.
16. Patel BR, Khanpara BG, Mehta PI, Patel KD, Marvania NP. Evaluation of perceived social stigma and burnout, among health-care workers working in COVID-19 designated hospital of India: a cross-sectional study. *Asian J Soc Health Behav* 2021;4(4): 156–62.
17. Tipa RO, Tudose C, Pucarea VL. Measuring burnout among psychiatric residents using the Oldenburg Burnout Inventory (OLBI) instrument. *J Med Life* 2019;12(4):354–60.
18. Basudan S, Binanzan N, Alhassan A. Depression, anxiety and stress in dental students. *Int J Med Educ* 2017;8:179–86.
19. Peters L, Peters A, Andreopoulos E, Pollock N, Pande RL, Mochari-Greenberger H. Comparison of DASS-21, PHQ-8, and GAD-7 in a virtual behavioral health care setting. *Heliyon* 2021;7(3):e06473.
20. Tran TD, Tran T, Fisher J. Validation of the depression anxiety stress scales (DASS) 21 as a screening instrument for depression and anxiety in a rural community-based cohort of northern Vietnamese women. *BMC Psychiatry* 2013;13:24.
21. Amigo I, Asensio E, Menendez I, Redondo S, Ledesma JA. Working in direct contact with the public as a predictor of burnout in the banking sector. *Psicothema* 2014;26(2):222–6.
22. da Silva Valente MS, Lopes CS, Pastor-Valero M, Menezes PR. Psychosocial work conditions and burnout among Brazilian bank employees: a cross-sectional study. *Ann Occup Hyg* 2016;60(5):567–80.
23. Yasmin S, Alam MK, Ali FB, Banik R, Salma N. Psychological impact of COVID-19 among people from the banking sector in Bangladesh: a cross-sectional study. *Int J Ment Health Addict* 2022;20(3):1485–99.
24. Kan D, Yu X. Occupational stress, work-family conflict and depressive symptoms among Chinese bank employees: the role of psychological capital. *Int J Environ Res Public Health* 2016;13(1):134.
25. Bakker AB, Costa PL. Chronic job burnout and daily functioning: a theoretical analysis. *Burn Res* 2014;1(3):112–9.
26. Hu NC, Chen JD, Cheng TJ. The associations between long working hours, physical inactivity, and burnout. *J Occup Environ Med* 2016;58(5):514–8.
27. Burns T, Huang J, Krivkovich A, Rambachan I, Trkulja T, Yee L. Women do more to fight burnout—and it's burning them out. <https://hbr.org/2021/10/women-do-more-to-fight-burnout-and-its-burning-them-out>. Updated 2021. Accessed July 10, 2022.
28. Li X, Kan D, Liu L, Shi M, Wang Y, Yang X, et al. The mediating role of psychological capital on the association between occupational stress and job burnout among bank employees in China. *Int J Environ Res Public Health* 2015;12(3):2984–3001.
29. Michailidis M, Georgiou Y. Employee occupational stress in banking. *Work* 2005;24(2):123–37.
30. Pandey A. A study of occupational stress among the public and private banks employees. *Int J Indian Psychol* 2021;9(4):2136–48.
31. Lee K, Suh C, Kim JE, Park JO. The impact of long working hours on psychosocial stress response among white-collar workers. *Ind Health* 2017;55(1):46–53.
32. Saju MD, Rajeev SP, Scaria L, Benny AM, Anjana N, Topa G. Mental health intervention at the workplace: a psychosocial care model. *Cogent Psychol* 2019;6(1):1601606.