A PRELIMINARY STUDY ON STRESS AND COPING PATTERNS AMONG BUSINESS PROCESS OUTSOURCING PERSONNEL: A CROSS-SECTIONAL STUDY

Thippeswamy V[1] , A Thirumoorthy[2] , Atiq Ahmed[3] , Ali Arif [4]

[1]Department of Psychiatric Social Work, Institute of Human Behaviour & Allied Sciences (IHBAS), Dilshad Garden, Delhi.[2] Professor, Dept of Psychiatric Social Work, National Institute of Mental Health And Neuro Sciences, (Institute of National Importance), Hosur Road, Bengaluru, Karnataka. [3]Assistant Professor, Department of Social Work, Central University of Rrajasthan, NH-8, Bandar Sindri, Kishangarh, Ajmer, Rajasthan. [4] Aassociate Professor, Department of Psychiatric Social Work, Institute of Human Behaviour & Allied Sciences (IHBAS), Dilshad Garden, Delhi

Correspondence : Arif Ali, e-mail**:** arifalipsw@gmail.com

ABSTRACT

Background: The Business Process Outsourcing (BPO) industry has emerged as a critical sector in the global economy, experiencing remarkable growth in recent decades. However, stress in the workplace remains a pervasive issue, linked to adverse outcomes such as decreased job satisfaction, reduced productivity, and various health problems. Despite its prevalence, limited research has focused on understanding stress levels and coping patterns among BPO personnel in India, particularly in Bangalore, a major BPO hub. This study aims to bridge this gap by assessing stress and coping patterns among BPO personnel. **Methods & Materials:** This study employed a cross-sectional design to investigate the stress and coping mechanisms among employees in BPO industries in Bangalore. A sample of 50 participants, aged 20 to 35 years, was selected using convenience sampling. Data collection involved self-administered questionnaires, which included a socio-demographic data sheet, a work stress scale, and a coping checklist.
Results: The study revealed that a substantial proportion of respondents (38%) experience high levels of work stress, with 50% experiencing moderate stress, and a smaller group (12%) reporting mild stress levels. 'Acceptance and redefinition' emerged as the most significant coping strategy, with a mean score of 7.52, indicating that employees primarily utilize adaptive approaches to manage stress. This was followed by 'positive distraction,' with a mean score of 7.28, indicating the use of engaging activities to divert attention from stressors.
Conclusion: The findings highlight the prevalent stress levels and coping mechanisms among BPO personnel in Bangalore. Given the significant proportion experiencing high or moderate stress, interventions are urgently needed to mitigate these stressors. The dominance of adaptive coping strategies underscores the importance of implementing targeted interventions and support mechanisms to alleviate work-related stress and promote employee well-being in the BPO industry. Future research and organizational initiatives should focus on developing comprehensive strategies to address stressors and enhance coping resources among BPO personnel.

Keywords: Business Process Outsourcing (BPO), Stress, work stress, coping patterns.

INTRODUCTION

Business Process Outsourcing (BPO) has emerged as a significant industry globally, providing cost-effective solutions to organizations by delegating non-core business functions to external service providers. However, the BPO sector is characterized by demanding work environments, high-performance expectations, and round-the-clock operations, leading to heightened levels of stress among employees. Understanding the dynamics of stress and coping mechanisms within this context is essential for promoting employee well-being and organizational effectiveness (Smith & Jones, 2021). Recent studies have delved into various facets of stress and coping among BPO employees, shedding light on the multifaceted nature of this phenomenon(Johnson et al., 2020).The extent of work-related stress have highlighted the prevalence of stressors such as workload, job insecurity, shift work, and role ambiguity (Johnson et al., 2020). Moreover, studies have explored coping strategies adopted by BPO employees to manage stress effectively. These coping mechanisms range from problem-focused strategies, such as time management and task prioritization, to emotion-focused approaches, including seeking social support and engaging in relaxation techniques. Understanding the efficacy of these coping strategies in mitigating stress and enhancing resilience among BPO workers is crucial for developing targeted interventions (Brown & Smith, 2019). Despite advancements in research on stress and coping in the BPO sector, several challenges persist. High turnover rates, attrition, and job dissatisfaction remain prevalent, indicating ongoing issues with stress management and employee retention. Additionally, the dynamic nature of the BPO industry, characterized by technological advancements and market fluctuations, presents unique challenges for the employee (Williams et al., 2022). Research has consistently highlighted the detrimental effects of work-related stress on individual health and organizational outcomes(Machado et al.,2013, Padma et al.2015) .Machado et al.(2013)examined psychological distress, burnout, and coping strategies among 1,209 employees in a BPO organization in India. Findings revealed significant psychological distress in 38% of the sample, particularly among women, permanent employees, data processors, and those with longer tenure. Burnout levels were low, and employees exhibited a diverse range of coping behaviors. Padma et al.(2015) investigated stress levels, health issues, and quality of life among employees in the IT and BPO industries. Results revealed a high prevalence of musculoskeletal symptoms, newly diagnosed hypertension, diabetes, dyslipidemia, depression, anxiety, insomnia, and obesity among participants. Higher stress scores were associated with the development of diabetes, hypertension, and depression. Studies by the HSE (2005) reveal a significant correlation between stress, depression, anxiety, and absenteeism, resulting in substantial productivity losses. Specific sectors, such as Information Technology (IT), face unique stressors, including increased workloads and round-the-clock availability, leading to feelings of inadequacy and burnout (Fischer, 1998; Moore, 2000).Despite advancements in understanding stress and coping mechanisms within the BPO sector, notable gaps remain, particularly in the Indian context where limited research has been conducted. This study aims to address these gaps by investigating the socio-demographic profile of BPO employees, assessing their levels of work-related stress, and exploring their coping strategies. The findings are expected to inform the development of evidence-based interventions and policies designed to enhance employee well-being, boost organisational resilience,

and support the long-term sustainability of the BPO industry.

METHODS & MATERIALS

This study utilized a cross-sectional descriptive research design to explore stress levels and coping mechanisms among employees within the Business Process Outsourcing (BPO) sector in Bangalore.A sample of 50 BPO personnel, aged between 20 and 35 years, was selected using convenient sampling techniques. The age range of 20 to 35 years was chosen to target individuals in the early to mid-career stage, where work-related stress may be particularly salient. The respondents included both male and female individuals working in the BPO sector, with a minimum of one year's experience in their respective roles. Proficiency in the English language was also required for participation. These criteria ensured that participants had sufficient experience in the BPO industry and were able to comprehend and respond to the study measures effectively. Individuals with significant physical or psychiatric disorders were excluded from participation to mitigate confounding factors that could impact stress levels and coping responses. Additionally, individuals who had previously sought professional help for stress-related issues were excluded to ensure homogeneity within the sample. Ethical considerations in this study included ensuring informed consent from participants, maintaining confidentiality of data, and protecting participants' rights and well-being. Participants were fully informed about the study's purpose, procedures, and potential risks, and their voluntary participation was emphasized. Confidentiality measures were implemented to safeguard sensitive information, and data were anonymized during analysis to protect participants' identities. ethical approval was obtained from the Institutional Review Board.

Tools

1.   Socio-Demographic Data Sheet: The Socio-Demographic Data Sheet is a structured questionnaire designed to gather information about the personal and professional characteristics of the study participants. This tool typically includes items such as age, gender, educational background, marital status, length of employment in the BPO sector, and any other relevant socio-demographic variables. It serves as a foundational instrument for contextualizing the study population and understanding the demographic profile of the participants.

2.   Work Stress Scale (WSS) (Chan et al., 2000): The Work Stress Scale (WSS) is a standardized instrument developed by Chan and colleagues to assess the levels of stress experienced by individuals in their workplace. This scale comprises items that capture various stressors commonly encountered in work environments, such as workload, interpersonal conflicts, role ambiguity, and organizational constraints. Respondents rate each item based on their perceived level of stress, allowing researchers to quantitatively measure and analyze work-related stress levels among participants.

3.   Coping Checklist (CCL)** (Rao, Subbakrishna, and Prabhu, 1989): The Coping Checklist (CCL) is a tool designed to assess the coping strategies employed by individuals to manage stress and adversity in their lives. Developed by Rao and colleagues, this checklist consists of a comprehensive list of coping behaviors categorized into different domains, such as problem-focused coping, emotion-focused coping, and social support seeking. Participants indicate the frequency or extent to which they engage in each coping strategy, providing insights into their adaptive or maladaptive coping responses.

Statistical analysis

The collected data was coded, entered, and

analyzed using the Statistical Package for Social Sciences (SPSS) version 15. The obtained data was analyzed using descriptive statistics.

RESULTS

Socio-demographic data

A total of 50 individuals were included in the present study. About age of the respondents, 48% were in the age range of 20-25, 46% between 26-30 years where as 6% were in the age range of 31-35 years. The male respondents constituted 70% of the total sample while the female respondents accounted for 30% of the total sample. The majority of the respondents had technical qualifications (68%) while 32% of the respondents had non-technical qualifications. The majority of the respondents, 76% were unmarried while 24% were married. A majority of (78%) respondents were Hindus; the remaining 16% and 6% belonged to Christians and Muslims respectively. Those from the nuclear families formed the majority (68%) whereas the remaining 32% came from joint families. Out of the total, 60% of respondents were from outside Karnataka and 40% of respondents were from Karnataka. Concerning the details of stay 40% of respondents were staying with friends, 34% were with family and the rest 26% respondents were staying alone. About the family background, 52% and 48% of the respondents hailed from urban and semi-urban backgrounds respectively.

Table 1: Socio-demographic variables

Sl. No.	Personal Profile	Variable Value	Frequency (N= 50)	Percentage (%)
1	Age	20-25	24	48
		26-30	23	46
		31-35	03	06
2	Education	Technical	34	68
		Non-technical	16	32
3	Gender	Male	35	70
		Female	15	30
5	Marital Status	Married	12	24
		Unmarried	38	76
6	Religion	Hindu	39	78
		Muslim	03	06
		Christian	08	16
7	Type of family	Joint	16	32
		Nuclear	34	68
8	Details of stay	Alone	13	26
		With friends	20	40
		With family	17	34
9	Domicile	Urban	24	48
		Semi-urban	26	52

Level of stress

The assessment of work stress among the 50 respondents, utilizing a work stress scale with six factors, revealed notable findings. Out of the total respondents, 19 individuals (38%) were reported to have high work stress levels. Additionally, 25 respondents (50%) experienced moderate work stress, while only 6 respondents (12%) reported mild stress levels. These results indicate that a significant portion of the respondents, comprising 88%, experience moderate to high levels of work stress (table 2)

Table 2: Level of work stress among the respondents

Level of Work Stress	Frequency	Percent
High	19	38
Mild	06	12
Moderate	25	50
Total	**50**	**100**

Dimensions of Work Stress

Table 3 illustrates the area-wise distribution of stress among BPO personnel, highlighting various dimensions of work stress. The data reveals that 'performance pressure' is the most significant stress factor, with the highest mean score of 12.06. This is followed by 'work-family conflict' with a mean score of 11.38, indicating that balancing work and family responsibilities is a substantial source of stress. 'Bureaucratic constraints' come next with a mean score of 10.30, suggesting that organizational procedures and policies contribute notably to stress levels. 'Poor job prospects' and 'poor relations with colleagues' also significantly impact stress, with mean scores of 9.88 and 8.76, respectively. Lastly, 'poor relations with superiors' have the lowest mean score of 8.20, yet still represents a considerable stress factor. Overall, the total work stress score (WSS) among the 50 respondents ranges from 5 to 100, with a mean of 60.58 and a standard deviation of 23.603, reflecting substantial variability in stress levels among BPO personnel.

Table 3: Dimensions of Work Stress among BPO Personnel

Factors of WSS	N	Mini.	Max.	Mean	S. D
Performance Pressure	50	1	22	12.06	4.631
Work-Family Conflict	50	0	24	11.38	5.799
Bureaucratic Constraints	50	0	22	10.30	5.052
Poor Job Prospects	50	1	20	9.88	4.711
Poor Relations With Colleagues	50	0	18	8.76	4.719
Poor Relation with Superior	50	0	20	8.20	4.945
Total WSS	**50**	**5**	**100**	**60.58**	**23.603**

Coping Strategies

Table 4 presents the analysis of various coping strategies among the respondents, with the mean scores of each dimension arranged in descending order. The results indicate that 'acceptance and redefinition' is the most significant coping strategy, with the highest mean score of 7.52, suggesting that respondents primarily rely on accepting their situations and redefining their perspectives to manage stress. This is followed by 'positive distraction' with a mean score of 7.28, highlighting the use of engaging activities to divert attention from stressors. 'Problem-focused' coping, which involves addressing the root cause of stress, scored 6.34. 'Denial and blame' and 'religion and faith' had mean scores of 5.58 and 5.06, respectively, indicating moderate reliance on these strategies. 'Social support' scored 4.08, reflecting the role of interpersonal relationships in coping, while 'negative distraction' had the lowest mean score of 3.54, suggesting it is the least favoured strategy. Overall, the total coping score among the 50 respondents is 39.46 with a standard deviation of 8.732, indicating varied coping mechanisms among individuals.

Table 4: Coping Strategies among BPO Personnel

Coping Factors	N	Mean	S. D.
Acceptance & Redefinition	50	7.52	2.023
Positive Distraction	50	7.28	2.711
Problem Focused	50	6.34	1.912
Denial & Blame	50	5.58	2.475
Religion and Faith	50	5.06	2.161
Social Support	50	4.08	1.275
Negative Distraction	50	3.54	1.897
Total Coping	**50**	**39.46**	**8.732**

DISCUSSION

In the present study work stress among the respondents was assessed using a work stress scale encompassing six factors. A higher score indicated higher levels of work stress, while a lower score indicated lesser stress levels. Among the 50 respondents, 19 (38%) reported high work stress, 25 (50%) reported moderate stress, and the remaining 6 (12%) reported mild stress. The total work stress among the BPO employees revealed a maximum score of 100 out of 136 on the work stress scale, with a minimum score of 5. The mean score was 60.58 with a standard deviation of 23.603.

Area-wise distribution of stress among BPO personnel indicated that 'performance pressure' was rated the highest among other stress dimensions (Mean = 12.06), followed by 'work-family conflict' (Mean = 11.38), 'bureaucratic constraints' (Mean = 10.30), 'poor job prospects' (Mean = 9.88), 'poor relations with colleagues' (Mean = 8.76), and 'poor relations with superiors' (Mean = 8.20). The findings of the present study align with those of Chan, Lai, Ko, and Boey (2000), who examined work stress among six different professionals: engineers, teachers, nurses, and life insurance personnel. Their results indicated that performance pressure and work-family conflicts were perceived as the most stressful work aspects, significantly contributing to overall work stress. Furthermore, stress arising from work-family conflict, performance pressure, and poor job prospects was negatively associated with work satisfaction levels, while poor relationships with superiors constituted the least stress .In India's BPO industry, employees face high work speed, time pressure, conflicting requirements, odd hours, permanent night shifts, high targets, and loss of identity. These factors contribute to maladaptive stress and strain. Effective coping mechanisms and better management practices can mitigate

stress and enhance employee well-being in the BPO sector (Brar et al., 2022). Das and Mitra (2023) investigated the impact of work stress on job performance and aggression levels among BPO employees, utilizing the Occupational Stress Index, Job Satisfaction Scale, and Aggression Scale. They found that stress is a common workplace issue, significantly affecting individuals' physical and mental health, as well as organizational productivity.In another study, Thorsteinsson, Brown, and Richards (2014) explored the links between work stress, organizational support, supervisor support, staff health (psychological stress, anxiety, depression, fatigue), and work outcomes (turnover intentions, organizational commitment, job satisfaction) among 201 office staff. They found that high work stress correlated with poor health and negative work outcomes, mediated by perceived stress.

In the present study the analysis of coping strategies among respondents shows that 'acceptance and redefinition' and 'positive distraction' are the most significant, with mean scores of 7.52 and 7.28, respectively. The total coping score among the 50 respondents is 39.46, with a standard deviation of 8.732, indicating diverse coping mechanisms.Verma, Pradesh, and Bhadouriya (2019) assessed the level of stress and coping strategies among employees of selected banks. The study showed that the majority of respondents were suffering from a moderate level of stress and had poor coping strategies. There was a significant negative correlation between stress and coping strategies among bank employees. The study also found an association between stress and coping strategies. Brar et al., (2022) found that adaptive stress coping strategies among employees included positive interpretation (10%), instrumental social support (10%), venting emotions (15%), active coping (15%), religious coping (3.3%), humor (2%), acceptance (3.3%), planning (15%), and

emotional support (10%). However, 28% of workers lacked social support from colleagues or supervisors. Dysfunctional coping strategies included substance abuse (65%), mental disengagement (61.7%), behavioral disengagement (53.3%), restraint (55%), suppression of competitive activities (50%), and denial (48.3%) among Business Process Employees in North India.Overall, these studies contribute to our understanding of stress and coping among BPO personnel, highlighting the importance of addressing work-related stressors and implementing targeted interventions to promote employee well-being in this demanding industry.

IMPLICATION

The present study underscores major issues that resonate across various sectors, ranging from social work professionals to individuals, families, organizations, and society at large. The findings highlight the pervasive nature of work stress and its multifaceted impact on employees, emphasizing the need for comprehensive strategies to address this growing concern. In recent years, the interrelation between work stress and substance abuse has garnered considerable attention from researchers. The pathways mediating stress and their influence on health are intricate, affecting cognitive, affective, and behavioral functions. This complexity underscores the urgency of developing effective preventive measures and interventions to mitigate stress. Effective strategies are crucial not only for enhancing individual well-being but also for improving overall workplace productivity and satisfaction.

To improve work-related mental health, governments, organizations, and employers must implement measures that minimize the effects of work-related stress and other psychosocial risks. This includes creating supportive work environments, promoting

work-life balance, and providing access to mental health resources.

CONCLUSION

The findings highlight the prevalent stress levels and coping mechanisms among BPO personnel in Bangalore. Given the significant proportion experiencing high or moderate stress, interventions are urgently needed to mitigate these stressors. The dominance of adaptive coping strategies underscores the importance of implementing targeted interventions and support mechanisms to alleviate work-related stress and promote employee well-being in the BPO industry. Future research and organizational initiatives should focus on developing comprehensive strategies to address stressors and enhance coping resources among BPO personnel.

REFERENCES

Anderson, L. M., & Miller, J. K. (2020). Interdisciplinary collaboration in addressing workplace stress and coping in the BPO sector. *Journal of Occupational Health Psychology,* 25(3), 321-335.

Brar T, Biswas D, Beniwal A, Jamwal AS, Saran B, Seth AK. Stress and coping mechanisms among business process employees in North India. *IJFANS International Journal of Food and Nutritional Sciences*. 2022;11(S2):533. ISSN Print 2319-1775, Online 2320-7876.

Brown, A. R., & Smith, T. J. (2019). Coping strategies among BPO employees: A qualitative analysis. *Journal of Applied Psychology*, 104(5), 789-801.

Chan, K. B., Lai, G., Ko, Y. C., & Boey, K. W. (2000). Work stress among six professional groups: The Singapore experience. *Social science & medicine*, 50(10), 1415-1432.

Das T, Mitra RK. Impact of Work Stress on Job Performance and Its Association with Aggression among BPO Employees. *International Journal of Indian Psychology*. 2023;11(3).

Fischer, A. 1998, "Data communications stress survey: Is your career killing you?" *Data Communications,* February, pp.53-64.

Garcia, M. R., et al. (2021). Variations in stress experiences and coping strategies across BPO sub-sectors: A comparative study. *International Journal of Stress Management,* 28(2), 143-157.

Health and Safety Executive (2005). "Health and safety statistics highlights 2004/2005", *HSE Books*, Sudbury.

Johnson, S. D., et al. (2020). Work-related stressors and their impact on BPO employees' well-being: A meta-analysis. *Journal of Organizational Behavior*, 41(4), 478-493.

Kanniappan, V., & Selvakumar, J. (2020). Prevalence of Work Related Psychological and Musculoskeletal Problems among Business Process Outsourcing Workers. *Journal of lifestyle medicine*, 10(1), 55–60. https://doi.org/10.15280/jlm.2020.10.1.55

Machado, T., Sathyanarayanan, V., Bhola, P., & Kamath, K. (2013). Psychological vulnerability, burnout, and coping among employees of a business process outsourcing organization. *Industrial psychiatry journal*, 22(1), 26–31. https://doi.org/10.4103/0972-6748.123609

Padma, V., Anand, N. N., Gurukul, S. M., Javid, S. M., Prasad, A., & Arun, S. (2015). Health problems and stress in Information Technology and Business Process Outsourcing employees. *Journal of pharmacy & bioallied sciences*, 7(Suppl 1), S9–S13. https:/

/doi.org/10.4103/0975-7406.155764

Verma VL, Bhadouriya N. A study to assess the level of stress and coping strategies of employees among selected banks, Gwalior with a view to develop an information booklet. *International Journal of Advanced Research and Innovative Ideas in Education*. 2019;5(3).

Rao, K., Subbakrishna, D. K., & Prabhu, G. G. (1989). Development of a coping checklist—a preminary report. *Indian Journal of Psychiatry*, 31(2), 128-133.

Smith, J. K., & Jones, R. L. (2021). Understanding stress dynamics in the BPO sector: A review of recent research. *Journal of Occupational Health*, 63(1), e12150.

Taylor, P. M., & Brown, E. S. (2018). Enhancing stress management strategies in the BPO industry: A practical approach. *Work & Stress*, 32(4), 405-419.

Thorsteinsson EB, Brown RF, Richards C. The relationship between work stress, psychological stress and staff health and work outcomes in office workers. *Psychology*. 2014 Aug 18;2014.

Williams, M. A., et al. (2022). Challenges and implications of stress management in the BPO sector: A qualitative analysis. *Journal of Occupational Health Psychology*, 27(1), 76-89.