The Impact of Occupational Stress on the Performance of Employees in Competitive Sectors: Systematic Review

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Abstract

This systematic review examines the impact of occupational stress on employee performance across various sectors, including health, education, IT, manufacturing, and service industries. By analyzing data from multiple studies, this review identifies common stressors and their effects on performance, highlighting sector-specific challenges. The findings suggest that while some stressors are universal, others are sector-specific, necessitating tailored interventions to mitigate stress and enhance performance.

Keywords: Occupational stress, employee performance, sectoral analysis, work-life balance, emotional strain

JEL Classification: I10, J24, J28, J81, L88, L86, O15

1. Introduction

Occupational stress is a significant issue affecting employee well-being and organizational productivity. According to Kaur (2023), "in contemporary organizations, effective management is crucial for addressing occupational stress and enhancing employee performance" (p. 19). In addition to that, Haque et al. (2020) argued that occupational stress arises from various work-related demands and pressures, leading to physiological and psychological responses that can negatively impact employee performance. Different sectors experience unique stressors due to varying job demands, work environments, and organizational cultures (Haque & Yamoah, 2021). The scope of this review includes studies from diverse sectors such as health, education, IT, manufacturing, and service industries. By focusing on a wide range of sectors, this review provides a comprehensive understanding of occupational stress and its implications for employee performance. The significance of this research lies in its potential to inform organizational strategies for managing stress, thereby enhancing employee well-being and productivity (Haque, 2023).

The primary aim of this paper is to systematically review the existing literature on occupational stress and its impact on employee performance across various sectors. This review seeks to identify common and sector-specific stressors, analyze their effects on performance, and provide recommendations for mitigating occupational stress.

2. Literature Review

Definition and Types of Occupational Stress

According to Jose and Kaur (2023), "stress is a pervasive phenomenon, not new and manifesting at various life stages" (p.35). Stranks (2005) defined it as the "disturbance of the body's natural equilibrium." Haque & Aston (2016) delved deeper, highlighting its frequent occurrence in the workplace and its potential to impact employees' efficiency and well-being, both positively and

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adversely. Occupational stress refers to the physiological and psychological responses to work-related demands and pressures. Prolonged working hours often subject employees to pressure, exacerbated by factors like a demanding environment, tight deadlines, and unclear instructions from managers (Kaur, 2023). Common types include role overload, role conflict, and job insecurity. Haque et al. (2020) identified role overload as a significant stressor in the IT sector, while job insecurity was prevalent in the manufacturing sector. Other research has highlighted the impact of organizational politics and lack of autonomy on occupational stress (Karasek & Theorell, 1990; Quick & Henderson, 2016). The Job Demand-Control Model suggests that job stress arises from the interaction between job demands and the degree of control an employee has (Karasek & Theorell, 1990). The Effort-Reward Imbalance Model focuses on the balance between the efforts employees invest in their work and the rewards they receive (Siegrist, 1996). Both models provide a framework for understanding how occupational stress affects employee performance across different sectors.

Occupational Stress in Different Sectors

In the health sector, high job demands, long hours, and emotional strain contribute to stress. Impact on performance includes burnout, reduced patient care quality, and high turnover rates (Rahim et al., 2022). Health professionals often face stress due to the high stakes of their work, leading to significant performance issues (Haque et al., 2024; Schaufeli & Buunk, 2003). On the other hand, in the education sector, stressors include workload, student behavior, and administrative support. These factors affect teacher performance, job satisfaction, and student outcomes (Yamoah & Haque, 2022). Teachers are particularly vulnerable to stress due to the emotional labor involved in their roles (Haque et al., 2023; Kyriacou, 2001).

In the IT sector, rapid technological changes, high workload, and job insecurity are major stressors. These result in decreased job satisfaction and high turnover intentions (Haque et al., 2016). The fast-paced nature of the IT sector can exacerbate stress levels among employees (Haque et al., 2019; Tarafdar et al., 2007). Interestingly, in the manufacturing sector, physical demands, safety concerns, and monotonous tasks contribute to stress. These lead to decreased productivity, increased errors, and higher absenteeism (Haque et al., 2021). The physical nature of manufacturing work often results in significant occupational stress (Haque et al., 2020; HSE, 2021). However, the dynamics shift in service sector, as customer interactions, work pace, and job insecurity are common stressors. These affect job satisfaction, customer service quality, and turnover rates (Haque et al., 2019). The customer-facing nature of service jobs can lead to high stress levels (Haque et al., 2021; Dormann & Zapf, 2004).

3. Methodology

This systematic review adopts a positivist research philosophy, which emphasizes the use of objective and measurable data to understand phenomena. Positivism is suitable for this study as it allows for the collection and analysis of empirical data from existing literature to identify patterns and relationships between occupational stress and employee performance (Haque, 2023; Saunders et al., 2019). The research design for this review is a systematic literature review. This approach involves a structured and comprehensive search of relevant studies, followed by critical appraisal and synthesis of findings. The systematic review design ensures that the research is thorough, transparent, and replicable (Haque & Yamoah, 2021; Tranfield et al., 2003).

The sample size for this review includes all relevant studies published in peer-reviewed journals from 2010 to 2024. A total of 50 studies were included in the final analysis, covering various sectors such as health, education, IT, manufacturing, and service industries. The primary research instrument for this review is a data extraction form used to collect information from selected studies. The form includes fields for study characteristics, stress factors, performance outcomes,

and methodological quality (Haque et al., 2020). In addition to that, observation in this context refers to the systematic review of documented evidence from the selected studies. This involves identifying patterns and themes related to occupational stress and its impact on employee performance across different sectors (Booth et al., 2016). While doing the systematic review, we ensured that inclusion and exclusion criteria is considered adequately.

A table summarizing the inclusion and exclusion criteria:

Table 1: Inclusion and exclusion criteria

Inclusion	Exclusion
Peer-reviewed journal articles	Non-peer-reviewed sources
Published between 2010 and 2024	Studies published before 2010
Studies focusing on occupational stress and employee performance	Studies not related to occupational stress or employee performance
Research conducted in various sectors	Studies focusing on a single sector without broader applicability

Source: *Own illustration*

Reliability and validity were ensured through a rigorous selection process and critical appraisal of included studies. Inter-rater reliability was achieved by having two independent reviewers screen and assess the quality of studies. Validity was enhanced by including a diverse range of studies from multiple sectors, providing a comprehensive overview of the topic (Haque et al., 2021; Gough et al., 2017).

4. Findings and Discussions

The systematic review synthesized findings from 50 studies across various sectors, highlighting the diverse range of occupational stressors and their impacts on employee performance. The sectors examined include health, education, IT, manufacturing, and services. The results underscore the pervasive nature of occupational stress and its significant influence on job performance, while also revealing sector-specific stressors and outcomes. Occupational stress is a universal phenomenon impacting all sectors, though the specific stressors and outcomes vary. Common stressors include high job demands, lack of organizational support, job insecurity, and poor work-life balance. These stressors often lead to burnout, decreased job satisfaction, increased turnover intentions, and reduced productivity. For instance, health professionals experience high emotional demands and workload, leading to burnout and decreased care quality. In the education sector, teachers face stress from heavy workloads and challenging student behavior, impacting job satisfaction and student outcomes. The IT sector contends with rapid technological changes and job insecurity, resulting in decreased job satisfaction and high turnover. Manufacturing workers deal with physical demands and safety concerns, affecting productivity and error rates. Service sector employees face stress from customer interactions and job insecurity, which impacts service quality and job satisfaction.

A summary of these findings, highlighting the characteristics of selected studies, stress factors, and performance outcomes, is presented in the table below.

Table 2: Stressors and performance outcomes

Sector	Stressors	Performance Outcomes	References
Health	High job demands Emotional strain	Burnout Turnover Reduced care quality	Rahim et al. (2022)
Education	Workload Student behavior	Reduced job satisfaction Tower student outcomes	Yamoah & Haque (2022)

Sector	Stressors	Performance Outcomes	References
Information Technology	Technological changes Workload	Decreased job satisfaction Turnover intentions	Haque et al. (2016)
Manufacturing	Physical demands Safety concerns	Decreased productivity Increased errors	Haque et al. (2021)
Service	Customer interactions Job insecurity	Reduced service quality High turnover	Haque et al. (2019)

Source: *Own illustration*

In the healthcare sector, we found that 'high job demands' and 'emotional strain' are prevalent stressors for health professionals. These include long working hours, high patient loads, and the emotional toll of patient care. As a result, stressors lead to burnout and high turnover rates, which significantly impact the quality of patient care. Health professionals experiencing burnout are less likely to provide high-quality care, resulting in decreased patient satisfaction and potential increases in medical errors. On the other hand, in the education sector, stressors are teachers face heavy workloads and challenging student behavior. Administrative demands and lack of support further exacerbate stress levels. Thus, consequently stress leads to reduced job satisfaction among teachers, which negatively impacts their teaching effectiveness and student outcomes. High stress levels are also associated with increased teacher absenteeism and turnover, disrupting the learning environment.

In the IT sector rapid technological changes and high workload are significant stressors in the IT sector. Job insecurity due to constant industry changes adds to the stress. As a result, employees in the IT sector often report decreased job satisfaction and increased intentions to leave their jobs. High turnover rates in this sector can disrupt projects and reduce organizational efficiency. Nonetheless, in the manufacturing sector, physical demands and safety concerns are major stressors for manufacturing workers. Repetitive tasks and hazardous working conditions contribute to stress. These stressors lead to decreased productivity and an increase in errors and accidents. Stress-related absenteeism is also common, further impacting productivity. On the other hand, in the service sector, interactions with demanding customers and job insecurity are prevalent stressors in the service sector. Employees often face pressure to meet customer expectations without adequate support. Thus, stress in the service sector results in reduced job satisfaction and high turnover rates. Poor service quality and decreased customer satisfaction are common outcomes when employees are stressed.

The findings highlight that while occupational stress universally affects performance, specific stressors vary by sector. Health and education sectors face high emotional demands, while IT and manufacturing sectors deal with job insecurity and physical demands, respectively. Effective stress management strategies must be tailored to address these sector-specific challenges (Haque et al., 2024; Lazarus & Folkman, 1984; Cooper et al., 2001). Health professionals face unique stressors such as high emotional demands and long working hours, which can lead to burnout and reduced quality of care. Interventions such as providing psychological support and managing workloads can mitigate these stressors (Rahim et al., 2022; Schaufeli & Buunk, 2003). In education Sector, teachers experience stress due to heavy workloads and student behavior issues. Strategies like enhancing administrative support and offering professional development opportunities can improve job satisfaction and performance (Yamoah & Haque, 2022; Kyriacou, 2001). Within the IT sector, rapid technological changes and high job demands in the IT sector led to job insecurity and stress. Implementing continuous learning and career development programs can help reduce turnover intentions and enhance job satisfaction (Haque et al., 2016; Tarafdar et al., 2007).

In the manufacturing sector physical demands and safety concerns are major stressors for manufacturing workers. Improving workplace safety and reducing monotonous tasks through job rotation can boost productivity and reduce errors (Haque et al., 2021; HSE, 2021) while in service sector, stress in the service sector arises from customer interactions and job insecurity. Enhancing job security and providing customer service training can improve job satisfaction and service quality (Haque et al., 2019; Dormann & Zapf, 2004).

5. Conclusion, Limitations and Implications

Occupational stress significantly impacts employee performance across all sectors. To mitigate these effects, organizations should implement targeted interventions, such as stress management programs, organizational support, and workload adjustments. Future research should explore longitudinal impacts of stress and the effectiveness of various interventions.

This systematic review has several limitations that should be acknowledged, such as the scope of studies is limited. The review is limited to studies published between 2010 and 2024, which may exclude relevant earlier research. In addition to that publication bias unintentionally happened when only peer-reviewed journal articles were included, which may introduce publication bias as studies with significant findings are more likely to be published. This is a secondary analysis which means the data could be obsolete (second handed). Sector coverage is limited in scope. While the review covers a broad range of sectors, it may not fully represent the diversity of stressors and performance outcomes within each sector. Lastly, geographical bias is another limitation of this study. Most studies included are from developed countries, potentially limiting the generalizability of the findings to emerging economies.

Based on the systematic review, following recommendations have been proposed:

Sector-Specific Stress Management Programs: Develop tailored stress management programs that address the unique stressors in each sector (Haque et al., 2024; Cooper et al., 2001).

Enhance Support Systems: Provide robust support systems, including counseling services and peer support groups, to help employees cope with stress (Schaufeli & Buunk, 2003).

Promote Work-Life Balance: Implement policies that encourage a healthy work-life balance, such as flexible working hours and telecommuting options (Lazarus & Folkman, 1984).

Training and Development: Offer continuous learning and development opportunities to help employees adapt to changes and reduce job insecurity, especially in rapidly evolving sectors like IT (Tarafdar et al., 2007).

Improve Workplace Safety: In sectors like manufacturing, focus on improving workplace safety and ergonomics to reduce physical stressors (HSE, 2021).

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