



Identifying Influence of Stress on Professionals Working in Building Construction in Kathmandu Valley

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Abstract

Background: The construction industry in Kathmandu Valley plays a pivotal role in Nepal's economic development but is characterized by demanding work environments, rapid technological changes, and increasing business pressures. These factors have led to heightened stress among professionals, impacting their mental and physical well-being. Excessive workloads, unclear roles, limited support, and lack of autonomy are common stressors that affect job satisfaction and productivity. Despite the prevalence of stress in this sector, there has been limited research focused on its causes, effects, and management strategies within Nepal's construction industry. This thesis aims to fill that gap by investigating the influence of stress on building construction professionals in Kathmandu Valley, identifying key stressors, examining their impacts, and recommending effective approaches for stress management to enhance employee well-being and organizational performance. **Objectives:** This study aims to identify key stressors affecting health and performance, examine stress effects on individual



well-being and organizational outcomes, investigate stress prevalence among different professional roles, and recommend techniques to mitigate work stress impacts for construction professionals in Kathmandu Valley. **Methods:** The study used a mixed-methods approach, combining both qualitative and quantitative research methods. Data was collected through semi-structured questionnaires and in-depth interviews with construction professionals, and the results were analyzed using statistical tools such as descriptive analysis, correlation analysis, and t-tests to examine the causes and impacts of stress. **Findings:** The study found that construction professionals in Kathmandu Valley experience significant stress due to factors such as heavy workloads, tight deadlines, and lack of organizational support, which negatively impact their mental and physical well-being. While a strong positive correlation was observed between job stress and outcomes like anxiety, fatigue, depression, and dissatisfaction, the t-test analysis indicated no significant predictive relationship between low self-esteem and these stress-related outcomes. The research highlights the urgent need for effective stress management strategies in the construction sector to enhance employee well-being and organizational performance. **Conclusion:** The study concludes that job stress is a significant and pervasive issue among professionals working in building construction in Kathmandu Valley, primarily driven by factors such as excessive workloads, tight deadlines, and inadequate organizational support. While stress is found to have a strong correlation with negative outcomes like anxiety, fatigue, depression, and job dissatisfaction, the research did not establish a significant predictive link between low self-esteem and these stress-related effects. Ultimately, the thesis emphasizes the urgent need for construction organizations to recognize stress as a critical concern and to implement effective stress management strategies, fostering a healthier and more productive work environment for their employees. **Novelty:** It systematically explores the specific causes, effects, and management of job stress among building construction professionals in Kathmandu Valley using both quantitative and qualitative data. Unlike previous studies, it applies statistical analyses to directly examine the relationship between low self-esteem and stress outcomes, revealing that while correlations exist, predictive causation is not significant. The research provides new, locally relevant insights and practical recommendations for stress management tailored to Nepal's dynamic construction sector.

Keywords: Construction Industry Stress, Organizational Structure, Job Intrinsic Factors, Work-Life Balance, Stress Management

Introduction

The construction industry serves as a cornerstone of economic development in Nepal, particularly within the rapidly urbanizing Kathmandu Valley (Parajuli & Adhikari, 2025). Over recent years, this sector has undergone significant transformations, including increased automation, stricter regulations, and the introduction of new technologies and business models. These changes, while fostering growth and modernization, have also intensified the demands placed on construction professionals. Employees in this field often face excessive workloads,



ill-defined roles, limited support from superiors, and restricted autonomy, all of which contribute to elevated stress levels and impact both their mental and physical well-being (Stajkovic & Stajkovic, 2025).

Stress in the construction industry is not just a local issue but a global concern, as modern workplaces become increasingly fast-paced and complex (Harlin, 2024). While a certain amount of pressure can enhance performance, chronic or excessive stress is predominantly viewed as detrimental, leading to negative outcomes such as anxiety, fatigue, depression, and job dissatisfaction. The unpredictable and dynamic nature of construction projects, coupled with frequent changes in work environments and responsibilities, further exacerbates these stressors. As a result, managing employee stress has become a critical challenge for organizations aiming to maintain productivity and ensure the well-being of their workforce.

Despite its prevalence, job-related stress in the construction sector of Kathmandu Valley remains an under-researched topic. Most organizations have yet to adopt comprehensive strategies for identifying and mitigating stress among their employees. Understanding the specific causes and impacts of stress in this context is essential for developing effective interventions. This thesis seeks to address this gap by systematically investigating the sources, effects, and management of job stress among building construction professionals in Kathmandu Valley, with the goal of promoting healthier work environments and enhancing organizational performance.

A study in Nigeria focused on stressors among 107 building construction professionals from 60 projects. Key stress factors included uncomfortable site offices, lack of feedback, work scope variations, high work volumes, safety issues, fragmented work, poor communication, and inadequate staffing. The findings revealed that all professionals experienced stress. Mitigation measures suggested were taking responsibility within one's capacity, realistic budget and timeframe management, providing proper site offices, regular training, workshops, and entertainment opportunities (Bem, Anosike, Azuh, & Mosaku, 2011).

Manjunatha studied theoretical perspective of stress management. They performed extensive reviews on different research on stress management strategies and employees' performance. Their study is based on secondary data. Various online journals were referred, and necessary data were collected. From their study it was found that the well-being and performance of employees are an interrelated topic as it can affect the success of the banking sector. They revealed meditation and positive attitude can be beneficial for handling stress. In addition, walking, progressive relaxation, sleeping and stretching exercise can also be other helpful stress reduction tools (Manjunatha & Renukamurthy, 2017).

The researcher investigated stress among employees in a private sector bank, aiming to identify stress factors and suggest coping strategies. Stress is deemed inevitable due to organizational advancements and changes, leading to high stress levels for employees. The study recommends addressing stress through regular training, fostering openness, and promoting understanding among employees. The research identifies an imbalance between work and personal life as a major cause of workplace stress (Kumari & Milan, 2018).



The construction industry in India is growing a lot and needs to hire workers for its projects. Many of these workers are not highly skilled, which means they face a lot of pressure at work. This stress can lead to health problems. This study looked at how stressed these workers are and how it affects their health, specifically musculoskeletal disorders. We used surveys to gather information from six groups of workers. The construction workers often work long hours and deal with a lot of stress. Many of them reported pain in body parts during their work hours. The study found that these workers generally have a low quality of life in different aspects (Chakraborty, Das, Pathak, & Mukhopadhyay, 2017).

Prasad in their research on “A study on causes of stress among the employees and its effects on the employee performance at the workplace in an international Agricultural research institute, Hyderabad” focused on throwing a light on the widespread issue of stress and its impact on the employees. About 200 employees of the institute were randomly selected for survey for assessing the job related, organizational related, individual related and physiological reactions to stress. They utilized descriptive, correlation and regression analysis for evaluating the data. Cronbach’s alpha was taken for measuring the reliability of scale and internal consistencies of questionnaire. It was concluded that occupational stress had moderate impact on employees’ performance of institute. Also, employees’ reaction to stress-physiological factors also had a moderate impact on the performance of employees. They found that some employees had felt chronic neck and back pain as an effect of long sitting hours at work (Mahat, Karki, Neupane, Shrestha, & Shrestha, 2024).

Manjunatha and Renukamurthy (Manjunatha & Renukamurthy, 2017) on their work entitled “Occupational stress among bank employees” have discussed about occupational stress in private and nationalized bank employees from Lucknow city. According to them, occupational related stress is mainly the response people may have when provided with work demand and pressures which are not coordinated to their knowledge and abilities, and which challenge their capability to cope. They collected data from 120 male and female employees working in bank using questionnaire method and tested hypothesis. They found that in comparison to nationalized bank employees, private bank employees had more occupational stress. It showed a positive correlation between independent variables and occupational stress (Mahat, Neupane, & Shrestha, 2025).

Deepanshi and Dr. Mini conducted extensive study on organizational role stress on employees of public and private sector bank. According to their study, banking industries in India are facing huge changes and demonetization has impacted many banks which lead to enormous stress. Organizational role stress and job-related stress are the main problems that banking sector employees are facing these days. Main motive of this study was to find out role of demographic variable on stress on employee of private and public banks. 230 bank employees working in various banks of Jaipur city was considered for data collection. Structure questionnaire tool was used for collecting data. Occupational role stress scale was used for critically reviewing data, Total of 104 private bank employees and 126 public bank employees provided their response. It was found that employees’ qualifications, age and work experience



play a crucial role to cope up with stress. Employees of public sector banks faced moderate level of role stress such as inter role distance, personal inadequacy, role stagnation and self-role distance. On the other hand, employees of private sector banks faced high level of role stress such as role erosion, role isolation, inter role distance, role ambiguity, personal inadequacy, resource inadequacy and self-role distance. They found that stress has a role stress impact demographically. They suggested that it is quite possible to have control in life events and acknowledge role stress is a really difficult task for employees most of the time (Deepanshi & Arrawatia, 2018).

Purpose of the study:

- 1) To identify the major causes and sources of job stress among professionals working in the building construction sector in Kathmandu Valley.
- 2) To analyze the effects of job stress on the mental and physical well-being of construction professionals.
- 3) To examine the relationship between stress and outcomes such as anxiety, fatigue, depression, and job dissatisfaction among these professionals.
- 4) To recommend effective stress management strategies and practices that can help organizations reduce the negative impacts of stress and enhance employee well-being and performance.

Data Methods

The study employed a quantitative research approach, primarily utilizing structured questionnaires to collect data from professionals working in the building construction sector within Kathmandu Valley. A total of 151 respondents participated in the survey, providing information on their experiences with job stress, its causes, and its effects on their well-being and job satisfaction. The collected data were then analyzed using statistical tools such as descriptive statistics, Pearson's correlation, and t-tests to identify relationships between stress factors and various psychological and physical outcomes, ensuring a comprehensive understanding of stress among construction professionals.

Results

Professionals working in the building construction sector in Kathmandu Valley experience significant levels of job stress, primarily due to factors such as work pressure, tight deadlines, and insufficient support from management. Statistical analysis showed a strong positive correlation between job stress and negative outcomes like anxiety, fatigue, depression, and job dissatisfaction among employees. However, t-test results indicated that low self-esteem did not have a significant predictive relationship with these stress-related outcomes. Overall, the findings highlight the urgent need for construction organizations to recognize and address job stress through effective management strategies to enhance employee well-being and organizational performance.

Table 1: Cause of stress in a percentage

Work Pressure	35%
Tight Deadlines	25%
Lack of Support from Management	20%
Role Ambiguity	10%
Work-life Imbalance	10%

Description and Interpretation:

According to the data, work pressure is the most significant stressor, accounting for 35% of the total reported causes. This is followed by tight deadlines at 25%, highlighting the demanding and time-sensitive nature of construction projects. Lack of support from management contributes 20% of the stress, indicating that insufficient guidance and backing from leadership is a major concern for employees. Both role ambiguity and work-life imbalance each make up 10% of the stress factors, suggesting that unclear job responsibilities and challenges in balancing professional and personal life also play important roles. Overall, the chart emphasizes that while multiple factors contribute to stress in the construction industry, work pressure and tight deadlines are the most dominant, underscoring the need for effective workload management and organizational support systems.

Findings

The study revealed that stress is a pervasive issue among professionals working in the building construction sector of Kathmandu Valley. The main causes of stress identified were work pressure (35%), tight deadlines (25%), lack of support from management (20%), role ambiguity (10%), and work-life imbalance (10%). These factors were found to significantly affect professionals at all levels, contributing to a challenging and often overwhelming work environment.

Analysis of the data showed that high levels of job stress are strongly correlated with negative psychological and physical outcomes, including anxiety, fatigue, depression, and job dissatisfaction. Despite the strong correlation, t-test analysis indicated that low self-esteem did not have a significant predictive relationship with these stress-related outcomes. This suggests that while low self-esteem is present among some professionals, it is not the primary driver of negative stress impacts in this context.

The findings underscore the urgent need for construction organizations in Kathmandu Valley to recognize job stress as a critical issue and to implement effective stress management strategies. Addressing these stressors through supportive management, clear role definitions, and better work-life balance initiatives is essential for improving employee well-being, job satisfaction, and overall organizational performance. The study advocates for prioritizing employee mental health and creating a more supportive work environment to help mitigate the negative effects of stress in the construction industry.

Discussion

The findings of this study highlight that stress is a significant and persistent challenge among professionals working in the construction sector of Kathmandu Valley. The primary causes of



stress—work pressure, tight deadlines, lack of support from management, role ambiguity, and work-life imbalance—reflect both the demanding nature of the construction industry and the organizational shortcomings in supporting their workforce. These stressors are not only prevalent but also deeply embedded in the day-to-day operations of construction projects, making them difficult to address without systemic changes. The data suggest that employees at all levels are vulnerable to these pressures, which can accumulate and lead to chronic stress if not properly managed.

The analysis further reveals that high levels of job stress are strongly associated with negative psychological and physical outcomes, including anxiety, fatigue, depression, and job dissatisfaction. While the study found a strong correlation between stress and these adverse effects, the t-test results indicated that low self-esteem does not significantly predict the severity of stress-related outcomes among construction professionals. This finding suggests that while personal factors like self-esteem may play a role, the primary drivers of stress in this sector are external and organizational. These insights underscore the importance of focusing on workplace improvements, such as clarifying roles, providing better managerial support, and promoting a healthier work-life balance, rather than solely addressing individual psychological traits.

Overall, the study emphasizes the urgent need for construction organizations in Kathmandu Valley to recognize job stress as a critical issue impacting both employee well-being and organizational performance. Implementing effective stress management strategies—such as regular stress assessments, supportive leadership, clear communication, and employee wellness programs—can help mitigate the negative impacts of stress. By prioritizing the mental and physical health of their workforce, construction companies can not only improve job satisfaction and productivity but also foster a more sustainable and resilient organizational culture in an industry known for its high demands and rapid changes.

Conclusion

The study concludes that job stress is a significant and pervasive issue among professionals working in the building construction sector of Kathmandu Valley, primarily driven by work pressure, tight deadlines, and lack of managerial support. While stress is strongly correlated with negative outcomes such as anxiety, fatigue, depression, and job dissatisfaction, the research found no significant predictive relationship between low self-esteem and these stress-related effects. These findings underscore the urgent need for construction organizations to recognize stress as a critical concern and to implement effective management strategies that prioritize employee well-being, foster a supportive work environment, and ultimately enhance both job satisfaction and organizational performance.



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