

Impact of Workplace Environment and Workload on Job Satisfaction

Nuzul Akhtar Baharudin^{*}, Nor Fadilah Bahari & Nurza Mohamed Yusoff

*Faculty of Economics, Accountancy and Management, Universiti Islam Selangor,
Bandar Seri Putra, 43000 Kajang, Selangor, Malaysia*

**Corresponding author: nuzulakhtar@uis.edu.my*

ABSTRACT

This study examines the impact of workplace environment and workload on job satisfaction among employees in the operation department of a petrochemical company. The primary objective is to determine and analyze the relationship between these variables to understand how they collectively impact job satisfaction. A quantitative research approach was employed, using surveys to collect data from this specific group of employees. The collected data performed statistical analysis utilizing correlation tests to determine the strength and direction of the relationships between workplace environment, workload, and job satisfaction levels. The results reveal a positive relationship between the workplace environment and job satisfaction. Conversely, there is a negative relationship between workload and job satisfaction. The findings of this study contribute to the existing literature by providing empirical evidence on the relationships between workplace environment, workload, and job satisfaction. By addressing these factors, organizations can improve employee well-being, increase productivity, and develop strategies for human resources management.

Keywords: Workplace environment, Workload, Job satisfaction.

INTRODUCTION

Job satisfaction is commonly referred to as employees' affect and attitude towards their job. It is crucial to an organization's performance as it influences productivity, employee retention, and morale. Job satisfaction, a complex concept that encompasses employees' mental, physical, and behavioral reactions to their jobs, is crucial for achieving organizational success. Research shows that satisfied employees are more productive (Oswald et al., 2015). High levels of job satisfaction are associated with increased productivity, lower turnover rates, enhanced employee morale, and improved overall organizational performance. In contrast, dissatisfaction can lead to poor performance, absenteeism, and quitting, all of which reduce operational efficiency and profitability.

Various factors influence job satisfaction, including the workplace environment and workload. The workplace environment encompasses ergonomic designs, personal workspace control, and access to training and development, significantly enhancing job satisfaction, even in high-demand settings (Aruldoss et al., 2022). Improved well-being and motivation often correlate with a conducive environment, directly influencing job satisfaction. Therefore, creating a healthy workplace enhances satisfaction and reduces turnover and absenteeism (Voordt & Jensen, 2023).

On the other hand, workload refers to the quantity and complexity of tasks assigned to employees. A high workload can cause stress, which will reduce job satisfaction (Alzoubi et al., 2024). When workload exceeds employees' capacity, it often results in stress, fatigue, and

dissatisfaction. A negative workplace environment and high workload can lead to employment stress, burnout, and decreased job satisfaction. An increased workload increases stress levels and decreases job satisfaction; however, a supportive work environment can alleviate these consequences. Employees who receive appropriate resources and support can enhance their job satisfaction by maintaining a more satisfying work-life balance (Chowhan & Pike, 2023). Operational demands and safety requirements are of the utmost importance in high-stress industries like petrochemicals, making it particularly important to maintain a balance between these elements.

The petrochemical sector, a fundamental component of worldwide industrial operations, functions within rigorous schedules and regulatory structures. Employees in this sector, particularly in operational roles, frequently encounter distinct challenges, such as extended working hours, exposure to hazardous environments, and high job stress. These factors necessitate a deeper understanding of the workplace dynamics that influence job satisfaction. Therefore, this study was conducted to determine the relationship between workplace environment and workload on job satisfaction among employees in the operation department of a petrochemical company. This study employs a quantitative research methodology to provide empirical data regarding these correlations, offering significant insights for organizational leaders and human resource (HR) experts. The results of this research have broader implications for organizational management and HR development. Organizations can implement actions to enhance employee well-being, decrease turnover, and promote sustainable growth by addressing the determinants of work satisfaction. This study contributes to scholarly literature and practical frameworks for improving working conditions, especially in industrial areas such as petrochemicals.

LITERATURE REVIEW

Job satisfaction is a broad term that includes an employee's emotional and cognitive evaluation of their job experience. As defined by Spector (1997), it is the extent to which individuals experience satisfaction or dissatisfaction with their employment (Aziri, 2011), representing a subjective assessment of their feelings and attitudes regarding a job or particular elements of it (Milikić & Čučković, 2019; Truxillo et al., 2012). Job satisfaction is sometimes characterized as a good emotion that develops from one's job, which is significantly shaped by employees' work experiences and their interpretations of such occurrences (Ćulibrk et al., 2018).

The work environment significantly influences employee behavior, satisfaction, and productivity, as it is the atmosphere in which individuals interact to fulfill their responsibilities (Donley, 2021). In high-stress environments, such as the petrochemical industry, where safety is vital, the workplace environment plays an even more important role. Insel & Moos (1974) emphasize that an environment's psychological and social aspects are formed by the interaction between individuals and their surroundings, which profoundly affects behavior. Research by Candido et al., (2021) demonstrates that workplaces designed with a health-oriented focus lead to higher employee satisfaction and perceived productivity than conventional office layouts. Similarly, Raziq & Maulabakhsh (2015) emphasize the significance of a secure and collaborative work environment and top management support in fostering greater job satisfaction.

Workload encompasses the volume and difficulty of tasks assigned to employees and is a vital determinant of job satisfaction and overall well-being. Dasgupta (2013) defines workload as

the quantity of tasks allocated to an individual during the designated period. It represents the perceived correlation between the mental effort or resources required to complete a task (Inegbedion et al., 2020). Liu & Lo (2018) highlight that workload substantially affects job performance and satisfaction, illustrating its dual effect on employees' efficiency and morale. Excessive workloads are associated with stress, burnout, and diminished morale (Karasek, 1979). Osifila & Titilayo Abimbola (2020) further affirmed that excessive workload negatively influences job satisfaction, consequently diminishing overall performance. Conversely, an appropriate workload accompanied by explicit expectations can improve employee participation and satisfaction. Previous studies in industrial environments affirm that workload management is crucial for sustaining employee well-being and operational efficacy. These findings indicate the significance of efficient workload management in promoting employees' well-being and enhancing organizational productivity.

METHODOLOGY

This study employed a quantitative research approach to determine the relationships between workplace environment, workload, and job satisfaction. Surveys were utilized as the primary data collection technique due to their effectiveness in obtaining employee perceptions. The target population consisted of employees in the operations department of a petrochemical company. Based on the shared characteristics of the respondents, a stratified random sample is used to ensure all positions and shifts are represented, thus mitigating potential bias. In this survey, the sample size was determined using Krejcie & Morgan (1970). With the total number of employees (N) at 100 employees, the required sample size (S) is 80 employees. However, this study was able to collect a total of 83 respondents, which is more than adequate for this research objective.

A structured survey was developed, incorporating validated scales to measure the workplace environment, workload, and job satisfaction. The survey comprised Likert-scale questions ranging from 1 (strongly disagree) to 5 (strongly agree) and provided quantifiable insights into employees' experiences and perceptions. Collected data were analyzed using statistical software. Correlation analysis was conducted to examine the strength and direction of relationships between the variables. A significance level of 0.01 and 0.05 were set for hypothesis testing, ensuring rigorous and reliable finding.

FINDINGS

Eighty-three questionnaires were distributed via the WhatsApp app groups containing the employees of the operation department. In this study, the analysis relied on completed and submitted questionnaires. The study employed regression analysis to achieve the research objective. This analysis was conducted to determine the relationship between workplace environment and workload on job satisfaction and to discover the following results.

Table 1
Correlation Analysis Result

Variable	Correlation value	Significant value
Workplace environment	.389**	0.0 0.004
Workload	-.275*	0.0 0.046

*Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Table 1 above illustrates the results of the correlation analysis. The data analysis demonstrated a significant positive correlation ($r = 0.389$, $p < 0.01$) between the workplace environment and job satisfaction. Employees who recognized their work environment as secure, comfortable, and supportive indicated a higher level of satisfaction. Essential factors fostering this positive relationship comprised resource accessibility, transparent communication channels, and robust interpersonal interactions within teams. Conversely, a significant negative correlation ($r = -0.275$, $p < 0.05$) was identified between workload and job satisfaction. Employees experiencing high workloads reported lower satisfaction levels, frequently attributing to stress and exhaustion. However, some participants indicated that an acceptable workload and adequate support enhanced their job satisfaction. This finding indicates the necessity for a comprehensive strategy that concurrently addresses environmental factors and workload management to enhance job satisfaction.

DISCUSSION AND CONCLUSION

The results highlight the work environment's and workload's combined impact on job satisfaction. A positive working environment may significantly enhance satisfaction, but excessive workload diminishes it. These findings correspond with the current research, underscoring the necessity of formulating organizational strategies that consider both elements. In a petrochemical company characterized by high operational demands, cultivating a supportive environment might mitigate some of the pressures associated with a heavy workload. Organizations must prioritize ergonomic workplace designs, promote open communication, and guarantee access to essential resources. Simultaneously, workload management techniques, like task delegation and flexible scheduling, can reduce stress and avoid burnout.

This study contributes to the existing literature on job satisfaction by offering empirical evidence from the petrochemical industry. It suggests the key influence of working environments and workload on employees' job satisfaction. Organizations can improve retention rates, increase productivity, and improve employee well-being by addressing these factors. Future research might explore additional variables, such as organizational culture and

leadership styles, and investigate ongoing impacts. These insights will further enhance the understanding of the process of establishing thriving workplaces in industries.

REFERENCES

- Alzoubi, M. M., Al-Mugheed, K., Oweidat, I., Alrahbeni, T., Alnaeem, M. M., Alabdullah, A. A. S., Abdelaliem, S. M. F., & Hendy, A. (2024). Moderating role of relationships between workloads, job burnout, turnover intention, and healthcare quality among nurses. *BMC Psychology*, *12*(1), 495. <https://doi.org/10.1186/s40359-024-01891-7>
- Aruldoss, A., Berube Kowalski, K., Travis, M. L., & Parayitam, S. (2022). The relationship between work–life balance and job satisfaction: moderating role of training and development and work environment. *Journal of Advances in Management Research*, *19*(2), 240–271. <https://doi.org/10.1108/JAMR-01-2021-0002>
- Aziri, B. (2011). Aziri B. *Job Satisfaction: A Literature Review Management Research And Practice Vol Job Satisfaction: A Literature Review. Management Research and Practice*, *3*(4), 77–86.
- Candido, C., Gocer, O., Marzban, S., Gocer, K., Thomas, L., Zhang, F., Gou, Z., Mackey, M., Engelen, L., & Tjondronegoro, D. (2021). Occupants' satisfaction and perceived productivity in open-plan offices designed to support activity-based working: findings from different industry sectors. *Journal of Corporate Real Estate*, *23*(2), 106–129. <https://doi.org/10.1108/JCRE-06-2020-0027>
- Chowhan, J., & Pike, K. (2023). Workload, work–life interface, stress, job satisfaction and job performance: a job demand–resource model study during COVID-19. *International Journal of Manpower*, *44*(4), 653–670. <https://doi.org/10.1108/IJM-05-2022-0254>
- Ćulibrk, J., Delić, M., Mitrović, S., & Ćulibrk, D. (2018). Job satisfaction, organizational commitment and job involvement: The mediating role of job involvement. *Frontiers in Psychology*, *9*(FEB). <https://doi.org/10.3389/fpsyg.2018.00132>
- Dasgupta, P. R. (2013). Volatility of Workload on Employee Performance and Significance of Motivation: IT Sector. *Science Journal of Business and Management*, *1*(1), 1. <https://doi.org/10.11648/j.sjbm.20130101.11>
- Donley, J. (n.d.). *The Impact of Work Environment on Job Satisfaction: Pre-COVID Research to Inform the Future*. www.nurseleader.com
- Inegbedion, H., Inegbedion, E., Peter, A., & Harry, L. (2020). Perception of workload balance and employee job satisfaction in work organizations. *Heliyon*, *6*(1). <https://doi.org/10.1016/j.heliyon.2020.e03160>
- Insel, P. M., & Moos, R. H. (n.d.). *Psychological Environments Expanding the Scope of Human Ecology*.
- Karasek, R. A. (1979). *Job demands, job decision latitude, and mental strain: Implications for job redesign*. *Administrative Science Quarterly*, *24*, 285–308.

- Liu, H. L., & Lo, V. hwei. (2018). An integrated model of workload, autonomy, burnout, job satisfaction, and turnover intention among Taiwanese reporters. *Asian Journal of Communication*, 28(2), 153–169. <https://doi.org/10.1080/01292986.2017.1382544>
- Milikić, B. B., & Čučković, M. (2019). How to increase job satisfaction and organizational commitment in the ICT sector through job design. *Economic Annals*, 64(222), 81–116. <https://doi.org/10.2298/EKA1922081B>
- Morgan, K. (1970). Sample size determination using Krejcie and Morgan table. *Kenya Projects Organization (KENPRO)*, 38, 607-610.
- Osifila, G. I., & Titilayo Abimbola, A. (2020). Workload and lecturers' job satisfaction in Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria. *Journal of Education and Learning (EduLearn)*, 14(3), 416–423. <https://doi.org/10.11591/edulearn.v14i3.16140>
- Oswald, A. J., Proto, E., & Sgroi, D. (2015). Happiness and productivity. *Journal of Labor Economics*, 33(4), 789–822. <https://doi.org/10.1086/681096>
- Raziq, A., & Maulabakhsh, R. (2015). Impact of Working Environment on Job Satisfaction. *Procedia Economics and Finance*, 23, 717–725. [https://doi.org/10.1016/s2212-5671\(15\)00524-9](https://doi.org/10.1016/s2212-5671(15)00524-9)
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences* (Vol. 3). Sage.
- Truxillo, D. M., Cadiz, D. M., Rineer, J. R., Zaniboni, S., & Fraccaroli, F. (2012). A lifespan perspective on job design: Fitting the job and the worker to promote job satisfaction, engagement, and performance. *Organizational Psychology Review*, 2(4), 340–360. <https://doi.org/10.1177/2041386612454043>
- Voordt, T. van der, & Jensen, P. A. (2023). The impact of healthy workplaces on employee satisfaction, productivity and costs. In *Journal of Corporate Real Estate* (Vol. 25, Issue 1, pp. 29–49). Emerald Publishing. <https://doi.org/10.1108/JCRE-03-2021-0012>