(#14) The Impact of Green Building Interior Design, with a Focus on "Look and Feel," on Employee Satisfaction-In LEED Certified Office Buildings in Sri Lanka

Kariyawasam T.[1], Samarasinghe A.M.[2]

[1]*Department of Interior Architecture, NIBM National Innovation Centre, Sri Lanka,*
[2]*Department of Interior Architecture, NIBM National Innovation Centre, Sri Lanka,*
[2]*Department of Integrated Design, University of Moratuwa, Sri Lanka*

Abstract

This study investigates the impact of green building interior design, focusing on "look and feel," on employee satisfaction. Utilizing a mixed-methods approach, data were collected from 210 employees through surveys and semi-structured interviews with key stakeholders at MAS Thurulie, a LEED Platinum-certified building in Sri Lanka. Quantitative analysis via SPSS revealed significant correlations between design elements and satisfaction. Qualitative thematic analysis underscored the importance of ergonomic, aesthetic, and natural elements in enhancing well-being. Findings suggest that thoughtful interior design in green buildings significantly boosts employee satisfaction.

Keywords: *Green building, Interior, look and feel, Employee satisfaction*

Introduction

Green buildings are designed to minimize environmental impact and enhance human health by efficiently using energy, water, and resources while protecting occupant well-being. They incorporate sustainable materials, renewable energy, and efficient waste management throughout their lifecycle, from design and construction to operation and maintenance [1][2]. While green buildings' role in promoting sustainability is well established, the impact of green interior design on employee satisfaction, particularly in terms of "look and feel," is less understood. Existing research primarily addresses broader benefits like energy efficiency and environmental impact, leaving a gap in understanding how the aesthetic and sensory elements of green interiors affect employee well-being and satisfaction [3-10]. This research is conducted to explore this unexplored dimension, focusing specifically on the subjective experiences of employees within green buildings. To investigate this research

has selected MAS Thurulie as a case study. Thurulie represents LEED-certified green buildings in Sri Lanka, being the first in the country to achieve LEED Platinum certification [11].

Methodology

This study used a mixed methods approach to explore how green building aesthetics impact employee satisfaction at MAS Thurulie. The quantitative component involves a detailed questionnaire assessing Employee satisfaction through metrics such as eNPS (Employee Net Promoter Score) [12], JSS (Job Satisfaction Survey) [13], and Look and Feel Satisfaction Scale, with data analysed using SPSS. This quantitative component involves a representative sample of 210 employees, including both office and factory workers with diverse job positions and tenures. The sample size was determined through statistical power analysis, ensuring the reliability and generalizability of the results to the broader population within the company. The qualitative component consists of semi-structured interviews with 15 employees, 3 supervisors, 3 nominated individuals, and the design team, focusing on personal experiences and suggestions related to Look and Feel. Thematic analysis is used for qualitative data. Ethical considerations include informed consent and confidentiality. Limitations include limited access to company data and potential self-report bias and restricted generalizability.

Discussion and Findings

The "look and feel" of green buildings, encompassing design, materials, space planning, and nature integration, significantly impacts occupants' psychological and emotional well-being [14]. Studies highlight that organic shapes, natural materials, and nature-inspired designs enhance visual appeal, promote harmony, foster a unique character in buildings, and positive effect on Employee satisfaction [15-17]. At MAS Thurulie, the interior design emphasizes worker comfort, functionality, and satisfaction, using materials like stabilized earth blocks, bamboo blinds, and natural colours to create a comfortable, aesthetically pleasing environment. Large windows bring in natural light, connecting employees to the lush greenery outside, and the thoughtful use of shapes and colours fosters tranquillity, order, and focus. This well-rounded design approach has significantly boosted employee satisfaction and visual experience.

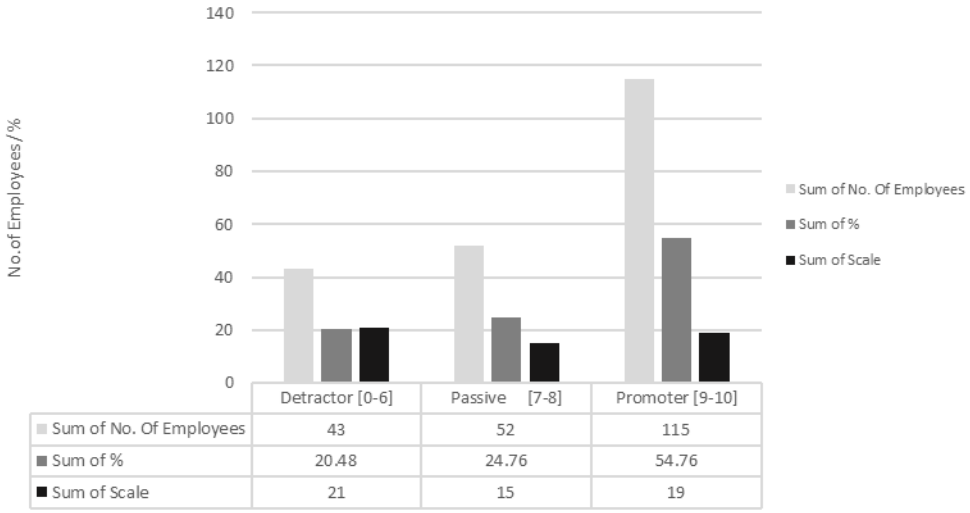

Figure 1: eNPS, Source: Survey Data

Table 01: Look and Feel Satisfaction [*Source: Survey Data*]

Scale	Mean	SD	r	β
Visually appealing	4.2	0.8	0.785	0.794
Materials used in the workplace	4.1	0.9	0.825	0.711
Layout and space planning with Ergonomics	4.3	0.7	0.784	0.752
Design elements used	4.2	0.8	0.779	0.725
Integration of natural elements	4.4	0.7	0.743	0.811
Overall satisfaction with Look and Feel	4.3	0.6	0.784	0.797

Table 2: Job Satisfaction [*Source: Survey Data*]

Scale	Mean	SD
Overall Job Satisfaction	4.4	0.7
Work Environment Satisfaction	4.1	0.6
Productivity at Work	4.3	0.7
Work-Life Balance Satisfaction	4.1	0.8
Likelihood to Recommend Workplace	4.2	0.6

The survey respondents expressed high satisfaction with the "look and feel" of their workspace, with mean scores ranging from M=4.1 to M=4.4 across various dimensions. For instance, the integration of natural elements, scoring a mean of M=4.4, was particularly appreciated for its positive impact on employee well-being, as highlighted by qualitative feedback emphasizing

the refreshing and serene environment. Furthermore, the Employee Net Promoter Score (eNPS) was calculated at 34.28, indicating a strong positive sentiment towards the workplace, with 54.76% of employees categorized as promoters. This suggests a significant likelihood of employees recommending MAS Thurulie as a workplace, reflecting the overall favorable perceptions of the work environment. Job satisfaction measures also indicated high satisfaction, with an overall mean score of M=4.4, while specific aspects like work environment satisfaction and work-life balance scored M=4.1. The survey results, backed by thematic analysis, underscore the critical role of a satisfied work environment and the emphasis on work-life balance in enhancing employee satisfaction. The high reliability of the Job Satisfaction Scale (Cronbach's alpha of 0.85) and the good model fit indices further validate these findings, suggesting that the look and feel at MAS Thurulie significantly contribute to employee comfort and satisfaction, ultimately supporting higher job satisfaction levels.

Conclusion

In conclusion, this research at MAS Thurulie highlights that green building interiors significantly enhance employee job satisfaction through improved visual appeal, material quality, ergonomically designed layout, and the integration of natural elements. The high Employee Net Promoter Score (eNPS) and strong correlations between look and feel scales emphasize the positive impact of Green building “Look and Feel” into Employee Satisfaction. These findings underscore the importance of investing in green building features to boost employee satisfaction in the Office environment. Future research should explore the long-term effects of green building interiors on job satisfaction to assess the sustainability of these benefits over time. Additionally, comparing different green building certifications and their specific impacts on various aspects of employee experience could provide a more nuanced understanding of how different standards influence workplace satisfaction.

References

[1] K. Jacob, "What is green building," 06 08 2014. [Online]. Available: https://www.usgbc.org/articles/what-green-building.

[2] T. Kariyawasam and S. M. Ajani, "The Impact of Green Building Interior to Employee productivity with the special reference to the Apparel industry in Sri Lanka," in *IDR*, Moratuwa, 2023.

[3] B. Brownell, "Examining the Environmental Impacts of Materials and Buildings (sample)," *IGI Global,* 2020.

[4] Y. Alhorr and Arif, "Occupant productivity and office indoor environment quality: A review of the literature," *Building and Environment,* vol. 105, no. 02, 2016.

[5] New School of Architecture & Design, "10 Benefits of Green Building," 2019. [Online]. Available: https://newschoolarch.edu/10-benefits-of-green-building/.

[6] T. Liu, "Sustainability Considerations of Green Buildings: A Detailed Overview on Current Advancements and Future Considerations," *Sustainability,* vol. 14, no. 21, 2022.

[7] JENKS2026, "Sustainability and Green Building Practices," 30 01 2024. [Online]. Available: https://green.org/2024/01/30/sustainability-and-green-building-practices/. [Accessed 26 03 2024].

[8] K. S. S. Kanhaiya, "Green Buildings for a Sustainable Future: Project Management Perspective," 24 10 2023. [Online]. Available: https://projectmanagement.ie/blog/green-buildings-for-a-sustainable-future-project-management

[9] A. Thatcher, "The impact of a 'green' building on employees' physical and psychological wellbeing," *10.3233/WOR-2012-0683-3816,* 2012.

[10] 15 Writers, "Sample Essay: Job Satisfaction in the Workplace," 2024. [Online]. Available: https://15writers.com/sample-essays/job-satisfaction-in-the-workplace/.

[11] Roar Media, "Five Of Sri Lanka's Best Green Buildings," 25 11 2016. [Online]. Available: https://archive.roar.media/english/life/economy/green-buildings-sri-lankas-corporates-can-keep-clean. [Accessed 23 02 2024].

[12] D. N. Rao, "Impact of employee net promoter score in organisational growth," 2019.

[13] H. S. D. Gunasinghe," Factors affecting job satisfaction among employees in telecommunication companies in Sri Lanka," 2023.

[14] G. Newsham and B. Birt, "Do green buildings have better indoor environments? New evidence," *Building Research and Information,* vol. 44, no. 4, 2013.

[15] A. K. Demirkol, "Integratıng bıophılıc desıgn elements ınto office desıgns," *Ain Shams Engineering Journal,* 2024.

[16] J. Kim and K. Park, "The Design Characteristics of Nature-inspired Buildings," *Civil Engineering and Architecture,* vol. 6, no. 2, 2018.