

Documents

Munir, F.F.A.^{a b}, Sapian, A.R.^a, Zulkifli, N.H.^a, Mansor, M.^c, Ibrahim, P.H.^c

BIOPHILIC DESIGN ELEMENTS PREFERENCES AMONG GOVERNMENT OFFICERS IN PUTRAJAYA, MALAYSIA
(2024) *Planning Malaysia*, 22 (6), pp. 567-577.

DOI: 10.21837/pm.v22i34.1649

^a Department of Architecture, Kulliyah of Architecture and Environmental Design, Universiti Islam Antarabangsa Malaysia, Malaysia

^b Centre of Studies for Architecture, Department of Built Environment Studies and Technology, College of Built Environment, Universiti Teknologi Mara, Malaysia

^c Department of Landscape Architecture, Kulliyah of Architecture and Environmental Design, Universiti Islam Antarabangsa Malaysia, Malaysia

Abstract

The theory of human dependence on other living things and their processes is called the "biophilia hypothesis", and has been discussed in various literature. The theory was then translated into design features, namely "biophilic design", to be assimilated with the built environment, including residential areas, the medical sector and commercial property such as office buildings. Through the implementation of biophilic design in office buildings, the building occupants can improve their physiological and psychological well-being as they spend a lot of time at work. The study examines the selected government office buildings in Putrajaya to identify the preferred biophilic design elements among government office workers that can be used to reduce their stress, and thus improve their productivity. Based on the questionnaire survey that was answered by 977 respondents from different types of work schemes, different working space environments, and different employment periods among the government office workers in Putrajaya, the findings have revealed that natural ventilation, external view to nature, and daylighting are the most preferred biophilic design elements that can help them feel less stressed in the office working spaces; these are followed by attraction and beauty, prospect and refuge. © 2024 by MIP.

Author Keywords

Biophilia; Biophilic Design Elements; Government Office Malaysia; Public Service Malaysia

Funding details

Kementerian Pendidikan MalaysiaKPM

Kementerian Sains, Teknologi dan InovasiMOSTI

Jabatan Perkhidmatan Awam MalaysiaJPA

Ministry of Higher Education, MalaysiaMOHEFRGS/1/2021/SSI02/UIAM/01/1

Ministry of Higher Education, MalaysiaMOHE

The authors acknowledge the Ministry of Higher Education (MOHE) for funding this research under the Fundamental Research Grant Scheme (FRGS) with reference code FRGS/1/2021/SSI02/UIAM/01/1. In addition, the authors would like to thank the Ministry of Science, Technology, and Innovation (MOSTI), the Palace of Justice, Perbadanan Putrajaya, the Ministry of Agriculture and Food Security (KPKM), the Ministry of Tourism, Arts, and Culture (MOTAC), Ministry of Natural Resources and Environmental Sustainability (NRES), Public Service Department Malaysia (JPA), Ministry of Education (MoE), Civil Aviation Authority of Malaysia (CAAM), and other government ministries and agencies for allowing the research to be conducted on their property.

References

- Aduwo, E.B., Akinwale, O.O.
Assessing the Implementation of Biophilic Design Strategies in Selected office Buildings in Lagos State, Nigeria
(2020) *International Journal of Engineering and Advanced Technology (IJEAT)*, 9 (5).
June 2020 ISSN: 2249 8958 (Online)
- Hedge, A.
(2017) *Ergonomic Workplace Design for Health, Wellness, and Productivity*, ISBN 9781466598430. CRC Press
- Kellert, S. R.
Dimensions, Elements, and Attributes of Biophilic Design
(2008) *Biophilic Design: The Theory, Science, and Practice of Bringing Buildings to Life*, John Wiley and Sons, Inc

- Browning, W.D., Ryan, C.O., Clancy, J.O.
(2014) *14 Patterns of Biophilic Design*,
New York: Terrapin Bright Green llc
- Kellert, S. R., Calabrese, E. F.
(2015) *The Practice of Biophilic Design*,
- Hamidi, Nur Najihah Erani, Mansor, Farah Ahlami, Hashim, Mimi Zazira, Muhammad, Norrini, Azib, Wan, Hazimah, Wan Nor
The Relationship between Physical Workplace Environment and Employees' Performance / Nur Najihah Erani Hamidi ...[et al.]
(2020) *Journal of Contemporary Social Science Research*, 4 (1), pp. 56-67.
and and and and and ISSN 0128-2697
- Nabilah, H. Z., Sapian, A. R., Putri, H. I
Conceptual Framework of Biophilic Design Elements (BDE) for Indoor Work Settings
(2023) *Jurnal Kejuruteraan SI*, 6 (1), pp. 123-137.
2023
- Suwati, Magdalena, Gagah, E.
Influence of motivation work, career development and cultural organization on the job satisfaction and implications on the performance of employees
(2016) *Journal of Management*, 2 (2).
M
- Hogan, N.L., Lambert, E.G., Griffin, M.L.
Loyalty, love and investments: The impact of job outcomes on the organizational commitment of correctional staff
(2013) *Criminal Justice & Behavior*, pp. 355-375.
- Samson, G. N., Waiganjo, M., Koima, J.
Effect of workplace environment on the performance of commercial banks employees in nakuru town
(2015) *International Journal of Managerial Studies and Research*, 3, pp. 76-89.
- Kamarulzaman, N., Saleh, S. Z., Hashim, H., Abdul-Ghani, A. A.
An Overview of the Influence of Physical Office Environments towards Employees
(2011) *Procedia Engineering The 2nd International Building Control Conference 2011*, 10, pp. 262-268.
(2011)
- (2019) *Putrajaya Smart City Blueprint*,
- *Green, Smart and Connected Putrajaya*,
(n.d) Retrieved from

Correspondence Address

Sapian A.R.; Department of Architecture, Malaysia; email: arazaks@iium.edu.my

Publisher: Malaysian Institute Of Planners**ISSN:** 16756215**Language of Original Document:** English**Abbreviated Source Title:** Plann.Malays.

2-s2.0-85210909494

Document Type: Article**Publication Stage:** Final**Source:** Scopus

ELSEVIER

Copyright © 2025 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

 **RELX Group™**